```
Ala Glu Pro Gly Leu Ser Asn Pro Trp Gly Ala Gly Ser Xaa Ala Leu
 1               5                   10                  15

Gly His Thr Trp Leu Pro Ala Pro Met Val Pro Val Pro Trp Asn Gly
                20              25              30

Asp Gly Gln Phe Trp Gly Gln Met Trp Cys Ser Gly Ile Gln Ser His
            35              40                  45

Phe Leu Pro Gly His Glu Leu Ser Gln Arg Pro Leu Gln Pro His Ser
        50              55                  60

Ala Pro Thr Tyr Leu Gly Thr Pro Ala Gly Ala Arg Glu Ala Pro Gly
    65              70                  75                  80

Gly Leu Gly Pro Lys
                85



<210> 1222
<211> 120
<212> PRT
<213> Homo sapiens

<400> 1222
Gly Leu Pro Glu His Val Val Pro Arg Leu Leu Gln Gly Val Glu Val
 1               5                   10                  15

Ser Trp Gly Trp Pro Arg Pro Arg Leu Leu Ser Gln Gly Glu Ala Ala
                20              25              30

Thr Asp Ser His Pro Thr Ala Leu Leu Lys Arg Met Phe Ala Val Val
            35              40                  45

Gly Gly Val Pro Val Pro Thr Leu Pro Gly Thr Arg Pro Trp Gly Thr
    50              55                  60

Leu Ala Gln Gly Cys Leu Gly Pro Ala Ser Cys Ala Ala Lys Val Gly
    65              70              75                  80

Gly Pro His Pro Lys Thr Asn Pro Gly Pro Arg Pro Leu Glu Ala Arg
                85              90                  95

Ala Ser Leu His Gly Leu Arg Gly Val Gly Ile Ser Pro Gln Ser Asp
                100             105             110

Leu Ala Ser Glu Leu Phe Ser Arg
            115             120
```

```
<210> 1223
<211> 228
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (164)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (204)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (212)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (215)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1223
Ala Glu Thr His Phe Ser Leu Pro Glu Phe Glu Pro Pro Phe Pro Ser
 1               5                  10                  15

Ser Arg Ser Pro Thr Pro Gly Ala Met Asp Pro Phe Thr Glu Lys Leu
            20                  25                  30

Leu Glu Arg Thr Arg Ala Arg Arg Glu Asn Leu Gln Arg Lys Met Ala
        35                  40                  45

Glu Arg Pro Thr Ala Ala Pro Arg Ser Met Thr His Ala Lys Arg Ala
    50                  55                  60

Arg Gln Pro Leu Ser Glu Ala Ser Asn Gln Gln Pro Leu Ser Gly Gly
65                  70                  75                  80

Glu Glu Lys Ser Cys Thr Lys Pro Ser Pro Ser Lys Lys Arg Cys Ser
                85                  90                  95

Asp Asn Thr Glu Val Glu Val Ser Asn Leu Glu Asn Lys Gln Pro Val
            100                 105                 110

Glu Ser Thr Ser Ala Lys Ser Cys Ser Pro Ser Pro Val Ser Pro Gln
            115                 120                 125
```

```
Val Gln Pro Gln Ala Ala Asp Thr Ile Ser Asp Ser Val Ala Val Pro
    130             135             140

Ala Ser Leu Leu Gly Met Arg Arg Gly Leu Asn Ser Arg Leu Glu Ala
145             150             155             160

Thr Ala Ala Xaa Ser Val Lys Thr Arg Met Gln Lys Leu Ala Glu Gln
            165             170             175

Arg Arg Arg Trp Asp Asn Asp Asp Met Thr Asp Asp Ile Pro Glu Ser
            180             185             190

Ser Leu Phe Ser Pro Met Pro Ser Glu Glu Lys Xaa Ala Phe Pro Ser
        195             200             205

Gln Thr Ser Xaa Phe Gln Xaa Ala Phe Gly Asn Phe Gln Leu Ala Lys
    210             215             220

Lys Gly Ala Arg
225


<210> 1224
<211> 178
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (142)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1224
Val Asp Cys Gly Asn Xaa Ala Ala Lys Trp Phe Thr Asn Phe Leu Lys
 1               5               10              15

Thr Glu Ala Tyr Arg Leu Val Gln Phe Xaa Thr Asn Met Lys Gly Arg
            20              25              30

Thr Ser Arg Lys Leu Leu Pro Thr Leu Asp Gln Asn Phe Gln Val Ala
```

```
              35                      40                      45

Tyr Pro Asp Tyr Cys Pro Leu Leu Ile Met Thr Asp Ala Ser Leu Val
         50              55              60

Asp Leu Asn Thr Arg Met Glu Lys Lys Met Lys Met Glu Asn Phe Arg
 65              70              75              80

Pro Asn Ile Val Val Thr Gly Cys Asp Ala Phe Glu Glu Asp Thr Trp
             85              90              95

Asp Glu Leu Leu Ile Gly Ser Val Glu Val Lys Lys Val Met Ala Cys
            100             105             110

Pro Arg Cys Ile Leu Thr Thr Val Asp Pro Asp Thr Gly Val Ile Asp
        115             120             125

Arg Lys Gln Pro Leu Asp Thr Leu Lys Ser Tyr Arg Leu Xaa Asp Pro
        130             135             140

Ser Glu Arg Glu Leu Tyr Lys Leu Ser Pro Leu Phe Gly Ile Tyr Tyr
145             150             155             160

Ser Val Glu Lys Ile Gly Ser Leu Arg Val Gly Asp Pro Val Tyr Arg
            165             170             175

Met Val
```

<210> 1225
<211> 64
<212> PRT
<213> Homo sapiens

<400> 1225

```
Arg Asn Ile Trp Lys Arg Gln Lys Thr Lys Lys Glu Glu Lys Arg Ser
 1               5              10              15

Leu Leu Asp Thr Leu Leu Lys Tyr Asn His Ile Asn Ile Leu Ser Tyr
            20              25              30

Phe Leu Pro Ala Phe Leu Gly Gln Ile Leu Val Gly Phe Tyr Ile Val
        35              40              45

Glu Ile Val Leu Phe Ile Gln Phe Tyr Thr Leu Phe His Leu Thr Leu
 50              55              60
```

<210> 1226
<211> 33
<212> PRT
<213> Homo sapiens

<400> 1226
Lys Gly Asn Lys Ser Trp Ser Ser Thr Ala Val Ala Ala Ala Leu Glu
 1   5   10   15

Leu Val Asp Pro Pro Gly Cys Arg Asn Val Thr Ile Ser Thr Cys Cys
            20   25   30

Pro

<210> 1227
<211> 402
<212> PRT
<213> Homo sapiens

<400> 1227
Asp Gln Ala Gly Pro Ala Ser Ala Glu Gln Leu His Ala Gly Pro Ala
 1   5   10   15

Thr Glu Glu Pro Gly Pro Cys Leu Ser Gln Gln Leu His Ser Ala Ser
            20   25   30

Ala Glu Asp Thr Pro Val Val Gln Leu Ala Ala Glu Thr Pro Thr Ala
            35   40   45

Glu Ser Lys Glu Arg Ala Leu Asn Ser Ala Ser Thr Ser Leu Pro Thr
    50   55   60

Ser Cys Pro Gly Ser Glu Pro Val Pro Thr His Gln Gln Gly Gln Pro
65   70   75   80

Ala Leu Glu Leu Lys Glu Glu Ser Phe Arg Asp Pro Ala Glu Val Leu
                85   90   95

Gly Thr Gly Ala Glu Val Asp Tyr Leu Glu Gln Phe Gly Thr Ser Ser
                100   105   110

Phe Lys Glu Ser Ala Leu Arg Lys Gln Ser Leu Tyr Leu Lys Phe Asp
                115   120   125

Pro Leu Leu Arg Asp Ser Pro Gly Arg Pro Val Pro Val Ala Thr Glu

```
            130                 135                 140

Thr Ser Ser Met His Gly Ala Asn Glu Thr Pro Ser Gly Arg Pro Arg
145                 150                 155                 160

Glu Ala Lys Leu Val Glu Phe Asp Phe Leu Gly Ala Leu Asp Ile Pro
                165                 170                 175

Val Pro Gly Pro Pro Pro Gly Val Pro Ala Pro Gly Gly Pro Pro Leu
                180                 185                 190

Ser Thr Gly Pro Ile Val Asp Leu Leu Gln Tyr Ser Gln Lys Asp Leu
                195                 200                 205

Asp Ala Val Val Lys Ala Thr Gln Glu Glu Asn Arg Glu Leu Arg Ser
210                 215                 220

Arg Cys Glu Glu Leu His Gly Lys Asn Leu Glu Leu Gly Lys Ile Met
225                 230                 235                 240

Asp Arg Phe Glu Glu Val Val Tyr Gln Ala Met Glu Glu Val Gln Lys
                245                 250                 255

Gln Lys Glu Leu Ser Lys Ala Glu Ile Gln Lys Val Leu Lys Glu Lys
                260                 265                 270

Asp Gln Leu Thr Thr Asp Leu Asn Ser Met Glu Lys Ser Phe Ser Asp
                275                 280                 285

Leu Phe Lys Arg Phe Glu Lys Gln Lys Glu Val Ile Glu Gly Tyr Arg
                290                 295                 300

Lys Asn Glu Glu Ser Leu Lys Lys Cys Val Glu Asp Tyr Leu Ala Arg
305                 310                 315                 320

Ile Thr Gln Glu Gly Gln Arg Tyr Gln Ala Leu Lys Ala His Ala Glu
                325                 330                 335

Glu Lys Leu Gln Leu Ala Asn Glu Glu Ile Ala Gln Val Arg Ser Lys
                340                 345                 350

Ala Gln Ala Glu Ala Leu Ala Leu Gln Ala Ser Leu Arg Lys Glu Gln
                355                 360                 365

Met Arg Ile Gln Ser Leu Glu Lys Thr Val Glu Gln Lys Thr Lys Glu
370                 375                 380

Asn Glu Glu Leu Thr Arg Ile Cys Asp Asp Leu Ile Ser Lys Met Glu
385                 390                 395                 400

Lys Ile
```

```
<210> 1228
<211> 460
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (75)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (147)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (435)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1228
Lys Gly Ala Gly Arg Cys Arg Leu Ser Lys Ile Gly Ala Thr Arg Arg
 1               5                  10                  15

Pro Pro Pro Ala Arg Val Arg Val Ala Val Arg Leu Arg Pro Phe Val
            20                  25                  30

Asp Gly Thr Ala Gly Ala Ser Asp Pro Pro Cys Val Arg Gly Met Asp
            35                  40                  45

Ser Cys Ser Leu Glu Ile Ala Asn Trp Arg Asn His Gln Glu Thr Leu
        50                  55                  60

Lys Tyr Gln Phe Asp Ala Phe Tyr Gly Glu Xaa Ser Thr Gln Gln Asp
65                  70                  75                  80

Ile Tyr Ala Gly Ser Val Gln Pro Ile Leu Arg His Leu Leu Glu Gly
                85                  90                  95

Gln Asn Ala Ser Val Leu Ala Tyr Gly Pro Thr Gly Ala Gly Lys Thr
                100                 105                 110

His Thr Met Leu Gly Ser Pro Glu Gln Pro Gly Val Ile Pro Arg Ala
                115                 120                 125

Leu Met Asp Leu Leu Gln Leu Thr Arg Glu Glu Gly Ala Glu Gly Arg
            130                 135                 140
```

Pro Trp Xaa Leu Ser Val Thr Met Ser Tyr Leu Glu Ile Tyr Gln Glu
145   150   155   160

Lys Val Leu Asp Leu Leu Asp Pro Ala Ser Gly Asp Leu Val Ile Arg
            165   170   175

Glu Asp Cys Arg Gly Asn Ile Leu Ile Pro Gly Leu Ser Gln Lys Pro
            180   185   190

Ile Ser Ser Phe Ala Asp Phe Glu Arg His Phe Leu Pro Ala Ser Arg
            195   200   205

Asn Arg Thr Val Gly Ala Thr Arg Leu Asn Gln Arg Ser Ser Arg Ser
    210   215   220

His Ala Val Leu Leu Val Lys Val Asp Gln Arg Glu Arg Leu Ala Pro
225   230   235   240

Phe Arg Gln Arg Glu Gly Lys Leu Tyr Leu Ile Asp Leu Ala Gly Ser
            245   250   255

Glu Asp Asn Arg Arg Thr Gly Asn Lys Gly Leu Arg Leu Lys Glu Ser
            260   265   270

Gly Ala Ile Asn Thr Ser Leu Phe Val Leu Gly Lys Val Val Asp Ala
    275   280   285

Leu Asn Gln Gly Leu Pro Arg Val Pro Tyr Arg Asp Ser Lys Leu Thr
    290   295   300

Arg Leu Leu Gln Asp Ser Leu Gly Gly Ser Ala His Ser Ile Leu Ile
305   310   315   320

Ala Asn Ile Ala Pro Glu Arg Arg Phe Tyr Leu Asp Thr Val Ser Ala
            325   330   335

Leu Asn Phe Ala Ala Arg Ser Lys Glu Val Ile Asn Arg Pro Phe Thr
            340   345   350

Asn Glu Ser Leu Gln Pro His Ala Leu Gly Pro Val Lys Leu Ser Gln
            355   360   365

Lys Glu Leu Leu Gly Pro Pro Glu Ala Lys Arg Ala Arg Gly Pro Glu
    370   375   380

Glu Glu Glu Ile Gly Ser Pro Glu Pro Met Ala Ala Pro Ala Ser Ala
385   390   395   400

Ser Gln Lys Leu Ser Pro Leu Gln Lys Leu Ser Ser Met Asp Pro Ala
            405   410   415

```
Met Leu Glu Arg Leu Leu Gln Leu Gly Pro Ser Ala Cys Leu Pro Gly
            420               425               430

Glu Pro Xaa Gly Pro Ser Val Glu Tyr Pro Lys Ala Arg Ala Asp Gly
            435               440               445

Ala Asn Glu Asp Ser Arg Arg Glu Gly Pro Arg Asp
    450               455               460
```

```
<210> 1229
<211> 239
<212> PRT
<213> Homo sapiens

<400> 1229
Ala Arg Gly Arg Leu Ala Phe Pro Cys Gly Arg Pro Asp Tyr Trp Ala
  1               5               10               15

Leu Ala Arg Arg Thr Ile Gly Thr Gly Leu Glu Arg Lys Ala Leu Gly
            20               25               30

Leu Pro Gly Ser Ser Glu Arg Pro Thr Ser Val Ser Ser Tyr Gln Gly
            35               40               45

Thr Arg Ile Arg Cys Ser Asn Pro Gly Gly Lys Met Arg Pro Leu Thr
    50               55               60

Glu Glu Glu Thr Arg Val Met Phe Glu Lys Ile Ala Lys Tyr Ile Gly
 65               70               75               80

Glu Asn Leu Gln Leu Leu Val Asp Arg Pro Asp Gly Thr Tyr Cys Phe
            85               90               95

Arg Leu His Asn Asp Arg Val Tyr Tyr Val Ser Glu Lys Ile Met Lys
            100               105               110

Leu Ala Ala Asn Ile Ser Gly Asp Lys Leu Val Ser Leu Gly Thr Cys
            115               120               125

Phe Gly Lys Phe Thr Lys Thr His Lys Phe Arg Leu His Val Thr Ala
            130               135               140

Leu Asp Tyr Leu Ala Pro Tyr Ala Lys Tyr Lys Val Trp Ile Lys Pro
145               150               155               160

Gly Ala Glu Gln Ser Phe Leu Tyr Gly Asn His Val Leu Lys Ser Gly
            165               170               175
```

```
Leu Gly Arg Ile Thr Glu Asn Thr Ser Gln Tyr Gln Gly Val Val Val
        180                   185               190

Tyr Ser Met Ala Asp Ile Pro Leu Gly Phe Gly Val Ala Ala Lys Ser
        195               200               205

Thr Gln Asp Cys Arg Lys Val Asp Pro Met Ala Ile Val Val Phe His
    210               215               220

Gln Ala Asp Ile Gly Glu Tyr Val Arg His Glu Glu Thr Leu Thr
225               230               235
```

```
<210> 1230
<211> 276
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (57)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (253)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1230
Ser Ala Val Val Ser Gly Cys Arg Val Arg Ser Cys Thr Ser Phe Ser
  1                 5                 10                   15

Asp Glu Pro Met Thr Gly Trp Met Ala Ala Ala Val Val Thr Leu Met
            20                25                30

Ile Arg Met Cys Phe Ser Val Tyr Thr Met Leu Ser Glu Ser Cys Gln
        35                40                45

Arg Met Val Ile Val Gly Tyr Gly Xaa Leu Leu Arg Arg Gln Ala Glu
    50                55                60

Leu Asp Gly Met Pro Ala Ile Asn Ala Lys Arg Val Tyr Arg Ile Met
65                70                75                80

Arg Gln Asn Ala Leu Leu Leu Glu Arg Lys Pro Ala Val Pro Pro Ser
                85                90                95

Lys Arg Ala His Thr Gly Arg Val Ala Val Lys Glu Ser Asn Gln Arg
            100               105               110
```

```
Trp Cys Ser Asp Gly Phe Glu Phe Cys Cys Asp Asn Gly Glu Arg Leu
        115             120             125

Arg Val Thr Phe Ala Leu Asp Cys Cys Asp Arg Glu Ala Leu His Trp
        130             135             140

Ala Val Thr Thr Gly Gly Phe Asn Ser Glu Thr Val Gln Asp Val Met
145             150             155             160

Leu Gly Ala Val Glu Arg Arg Phe Gly Asn Asp Leu Pro Ser Ser Pro
                165             170             175

Val Glu Trp Leu Thr Asp Asn Gly Ser Cys Tyr Arg Ala Asn Glu Thr
                180             185             190

Arg Gln Phe Ala Arg Met Leu Gly Leu Glu Pro Lys Asn Thr Ala Val
        195             200             205

Arg Ser Pro Glu Ser Asn Gly Ile Ala Glu Ser Phe Val Lys Thr Ile
        210             215             220

Lys Arg Asp Tyr Ile Ser Ile Met Pro Lys Pro Asp Gly Leu Thr Ala
225             230             235             240

Ala Lys Asn Leu Ala Glu Ala Phe Glu His Tyr Asn Xaa Trp His Pro
                245             250             255

His Ser Ala Leu Gly Tyr Arg Ser Pro Arg Glu Tyr Leu Arg His Gly
                260             265             270

Leu Val Met Gly
            275


<210> 1231
<211> 296
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1231
Lys Thr Ile His Leu Xaa Thr Phe Ile Val Leu Ile Arg Arg Leu Asp
  1             5               10              15


Cys Asn Phe Asp Ile Lys Val Leu Asn Ala Gln Arg Ala Gly Tyr Lys
                20              25              30
```

Ala Ala Ile Val His Asn Val Asp Ser Asp Asp Leu Ile Ser Met Gly
        35   40   45

Ser Asn Asp Ile Glu Val Leu Lys Lys Ile Asp Ile Pro Ser Val Phe
        50   55   60

Ile Gly Glu Ser Ser Ala Asn Ser Leu Lys Asp Glu Phe Thr Tyr Glu
65   70   75   80

Lys Gly Gly His Leu Ile Leu Val Pro Glu Phe Ser Leu Pro Leu Glu
            85   90   95

Tyr Tyr Leu Ile Pro Phe Leu Ile Ile Val Gly Ile Cys Leu Ile Leu
            100   105   110

Ile Val Ile Phe Met Ile Thr Lys Phe Val Gln Asp Arg His Arg Ala
        115   120   125

Arg Arg Asn Arg Leu Arg Lys Asp Gln Leu Lys Lys Leu Pro Val His
    130   135   140

Lys Phe Lys Lys Gly Asp Glu Tyr Asp Val Cys Ala Ile Cys Leu Asp
145   150   155   160

Glu Tyr Glu Asp Gly Asp Lys Leu Arg Ile Leu Pro Cys Ser His Ala
            165   170   175

Tyr His Cys Lys Cys Val Asp Pro Trp Leu Thr Lys Thr Lys Lys Thr
            180   185   190

Cys Pro Val Cys Lys Gln Lys Val Val Pro Ser Gln Gly Asp Ser Asp
        195   200   205

Ser Asp Thr Asp Ser Ser Gln Glu Glu Asn Glu Val Thr Glu His Thr
    210   215   220

Pro Leu Leu Arg Pro Leu Ala Ser Val Ser Ala Gln Ser Phe Gly Ala
225   230   235   240

Leu Ser Glu Ser Arg Ser His Gln Asn Met Thr Glu Ser Ser Asp Tyr
            245   250   255

Glu Glu Asp Asp Asn Glu Asp Thr Asp Ser Ser Asp Ala Glu Asn Glu
        260   265   270

Ile Asn Glu His Asp Val Val Val Gln Leu Gln Pro Asn Gly Glu Arg
        275   280   285

Asp Tyr Asn Ile Ala Asn Thr Val
    290   295

<210> 1232
<211> 69
<212> PRT
<213> Homo sapiens

<400> 1232
Asn Gln His Lys Glu Tyr Asp Lys Thr Pro Val Gly Asn Pro Glu Cys
 1   5   10   15

Ser Gly Pro Ser Cys Gly Leu Phe Tyr Gly Phe Met Lys Gly Pro Cys
                20   25   30

Pro His Gly Gly Asp His Gly Leu Ala Cys Gly Val Leu Gly Asp Gly
            35   40   45

Cys Leu Leu Ser Ser Ser Pro His Pro Ala Ser Cys Trp His Leu Gly
    50   55   60

Glu Glu Ser Ser Lys
    65

<210> 1233
<211> 423
<212> PRT
<213> Homo sapiens

<400> 1233
Leu Tyr Arg Gln Asp Tyr Asn Pro Lys Pro Lys Pro Ser Asn Glu Ile
 1   5   10   15

Thr Arg Glu Tyr Ile Pro Lys Ile Gly Met Thr Thr Tyr Lys Ile Val
                20   25   30

Pro Pro Lys Ser Leu Glu Ile Ser Lys Asp Trp Gln Ser Glu Thr Ile
            35   40   45

Glu Tyr Lys Asp Asp Gln Asp Met His Ala Leu Gly Lys Lys His Thr
    50   55   60

His Glu Asn Val Lys Glu Thr Ala Ile Gln Thr Glu Asp Ser Ala Ile
    65   70   75   80

Ser Glu Ser Pro Glu Glu Pro Leu Pro Asn Leu Lys Pro Lys Pro Asn
                85   90   95

Leu Arg Thr Glu His Gln Val Pro Ser Ser Val Ser Ser Pro Asp Asp

```
                    100                    105                    110

        Ala Met Val Ser Pro Leu Lys Pro Ala Pro Lys Met Thr Arg Asp Thr
                115                 120                 125

        Gly Thr Ala Pro Phe Ala Pro Asn Leu Glu Glu Ile Asn Asn Ile Leu
            130                 135                 140

        Glu Ser Lys Phe Lys Ser Arg Ala Ser Asn Ala Gln Ala Lys Pro Ser
        145                 150                 155                 160

        Ser Phe Phe Leu Gln Met Gln Lys Arg Val Ser Gly His Tyr Val Thr
                        165                 170                 175

        Ser Ala Ala Ala Lys Ser Val His Ala Ala Pro Asn Pro Ala Pro Lys
                    180                 185                 190

        Glu Leu Thr Asn Lys Glu Ala Glu Arg Asp Met Leu Pro Ser Pro Glu
                195                 200                 205

        Gln Thr Leu Ser Pro Leu Ser Lys Met Pro His Ser Val Pro Gln Pro
            210                 215                 220

        Leu Val Glu Lys Thr Asp Asp Val Ile Gly Gln Ala Pro Ala Glu
        225                 230                 235                 240

        Ala Ser Pro Pro Pro Ile Ala Pro Lys Pro Val Thr Ile Pro Ala Ser
                        245                 250                 255

        Gln Val Ser Thr Gln Asn Leu Lys Thr Leu Lys Thr Phe Gly Ala Pro
                    260                 265                 270

        Arg Pro Tyr Ser Ser Ser Gly Pro Ser Pro Phe Ala Leu Ala Val Val
                275                 280                 285

        Lys Arg Ser Gln Ser Phe Ser Lys Glu Arg Thr Glu Ser Pro Ser Ala
                290                 295                 300

        Ser Ala Leu Val Gln Pro Pro Ala Asn Thr Glu Glu Gly Lys Thr His
        305                 310                 315                 320

        Ser Val Asn Lys Phe Val Asp Ile Pro Gln Leu Gly Val Ser Asp Lys
                        325                 330                 335

        Glu Asn Asn Ser Ala His Asn Glu Gln Asn Ser Gln Ile Pro Thr Pro
                    340                 345                 350

        Thr Asp Gly Pro Ser Phe Thr Val Met Arg Gln Ser Ser Leu Thr Phe
                355                 360                 365

        Gln Ser Ser Asp Pro Glu Gln Met Arg Gln Ser Leu Leu Thr Ala Ile
```

```
        370                    375                    380

Arg Ser Gly Glu Ala Ala Ala Lys Leu Lys Arg Val Thr Ile Pro Ser
385             390             395             400

Asn Thr Ile Ser Val Asn Gly Arg Ser Arg Leu Ser His Ser Met Ser
            405             410             415

Pro Asp Ala Gln Asp Gly His
            420
```

```
<210> 1234
<211> 231
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (225)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1234
Thr Ala Lys Lys Asn His Lys Lys Leu Thr Ile Asn Pro Cys Glu Ile
  1             5             10              15

Ser Gly Cys Pro Lys Pro Thr Gln Ile Ile Ala Gly Asp Arg Pro Asp
            20              25              30

Asn His Trp Leu His Tyr Asp Ser Lys Thr Ile Pro Arg Thr Lys Lys
            35              40              45

Glu Trp Glu Ser Ser Cys Phe Val Glu Lys Thr His Trp Gly Tyr Tyr
    50              55              60

Thr Trp Pro Lys Asn Met Val Val Tyr Ala Gly Val Glu Glu Gln Pro
 65              70              75              80

Lys Leu Gly Arg Ser Arg Glu Asp Met Thr Glu Ala Glu Gln Ile Ile
                85              90              95

Phe Asp His Phe Ser Asp Pro Lys Phe Val Glu Gln Leu Ile Thr Phe
            100             105             110

Leu Ser Leu Glu Asp Arg Lys Gly Lys Asp Lys Phe Asn Pro Arg Arg
            115             120             125

Phe Cys Leu Phe Lys Gly Ile Phe Arg Asn Phe Asp Asp Ala Phe Leu
            130             135             140
```

```
Pro Val Leu Lys Pro His Leu Glu His Leu Val Ala Asp Ser His Glu
145             150                 155                 160

Ser Thr Gln Arg Cys Val Ala Glu Ile Ile Ala Gly Leu Ile Arg Gly
                165                 170                 175

Ser Lys His Trp Thr Phe Glu Lys Val Glu Lys Leu Trp Glu Leu Leu
            180                 185                 190

Cys Pro Leu Leu Arg Thr Ala Leu Ser Asn Ile Thr Val Glu Thr Tyr
        195                 200                 205

Asn Asp Trp Gly Ala Cys Ile Ala Thr Ser Cys Glu Ser Arg Asp Pro
        210                 215                 220

Xaa Glu Thr Ser Leu Ala Phe
225             230
```

<210> 1235
<211> 302
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (226)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1235

```
Arg Xaa Gly Ile Pro Gly Ser Thr His Ala Ser Gly Ala Val Ala Leu
 1           5                 10                  15

Tyr Phe Ile Asp Lys Leu Ala Leu Arg Ala Gly Asn Glu Lys Glu Asp
            20                  25                  30

Gly Glu Ala Ala Asp Thr Val Gly Cys Cys Ser Leu Arg Val Glu His
        35                  40                  45

Val Gln Leu His Pro Glu Ala Asp Gly Cys Gln His Val Val Glu Phe
    50                  55                  60

Asp Phe Leu Gly Lys Asp Cys Ile Arg Tyr Tyr Asn Arg Val Pro Val
65                  70                  75                  80
```

```
Glu Lys Pro Val Tyr Lys Asn Leu Gln Leu Phe Met Glu Asn Lys Asp
                85                  90                  95

Pro Arg Asp Asp Leu Phe Asp Arg Leu Thr Thr Thr Ser Leu Asn Lys
            100             105             110

His Leu Gln Glu Leu Met Asp Gly Leu Thr Ala Lys Val Phe Arg Thr
            115             120             125

Tyr Asn Ala Ser Ile Thr Leu Gln Glu Gln Leu Arg Ala Leu Thr Arg
    130             135             140

Ala Glu Asp Ser Ile Ala Ala Lys Ile Leu Ser Tyr Asn Arg Ala Asn
145             150             155             160

Arg Val Val Ala Ile Leu Cys Asn His Gln Arg Ala Thr Pro Ser Thr
            165             170             175

Phe Glu Lys Ser Met Gln Asn Leu Gln Thr Lys Ile Gln Ala Lys Lys
            180             185             190

Glu Gln Val Ala Glu Ala Arg Ala Glu Leu Arg Arg Ala Arg Ala Glu
            195             200             205

His Lys Ala Gln Gly Asp Gly Lys Ser Arg Ser Val Leu Glu Lys Lys
    210             215             220

Arg Xaa Leu Leu Glu Lys Leu Gln Glu Gln Leu Ala Gln Leu Ser Val
225             230             235             240

Gln Ala Thr Asp Lys Glu Glu Asn Lys Gln Val Ala Leu Gly Thr Ser
            245             250             255

Lys Leu Asn Tyr Leu Asp Pro Arg Ile Ser Ile Ala Trp Cys Lys Arg
            260             265             270

Phe Arg Val Pro Val Glu Lys Ile Tyr Ser Lys Thr Gln Arg Glu Arg
        275             280             285

Phe Ala Trp Ala Leu Ala Met Ala Gly Glu Asp Phe Glu Phe
    290             295             300
```

```
<210> 1236
<211> 63
<212> PRT
<213> Homo sapiens

<400> 1236
Ala Val Leu Val Ser Leu Glu Tyr Leu Ser Asp Arg Ile Lys Leu Lys
```

```
     1              5                   10                  15
   Leu Ser Gly Lys Leu Pro Val Tyr Ile Leu His Leu Val Tyr Arg Leu
               20              25              30

   Phe Cys Leu Ala His Lys Ala Phe Tyr Tyr Leu Ser Leu Cys Gln His
               35              40              45

   Leu Arg Ile Lys Asn Phe Pro Asp Ile Gln Ile Ser Asp Phe Asn
            50              55              60


   <210> 1237
   <211> 239
   <212> PRT
   <213> Homo sapiens

   <400> 1237
   Val Tyr Leu Leu Gly Ser Trp Leu Arg Arg His Ser Ser Tyr Thr Glu
     1              5                   10                  15

   Glu Met Gly Glu Glu Ala Asn Asp Asp Lys Lys Pro Thr Thr Lys Phe
               20              25              30

   Glu Leu Glu Arg Glu Thr Glu Leu Arg Phe Glu Val Glu Ala Ser Gln
               35              40              45

   Ser Val Gln Leu Glu Leu Leu Thr Gly Met Ala Glu Ile Phe Gly Thr
            50              55              60

   Glu Leu Thr Arg Asn Lys Lys Phe Thr Phe Asp Ala Gly Ala Lys Val
   65              70              75              80

   Ala Val Phe Thr Trp His Gly Cys Ser Val Gln Leu Ser Gly Arg Thr
               85              90              95

   Glu Val Ala Tyr Val Ser Lys Asp Thr Pro Met Leu Leu Tyr Leu Asn
               100             105             110

   Thr His Thr Ala Leu Glu Gln Met Arg Arg Gln Ala Glu Lys Glu Glu
               115             120             125

   Glu Arg Gly Pro Arg Val Met Val Val Gly Pro Thr Asp Val Gly Lys
               130             135             140

   Ser Thr Val Cys Arg Leu Leu Leu Asn Tyr Ala Val Arg Leu Gly Arg
   145             150             155             160

   Arg Pro Thr Tyr Val Glu Leu Asp Val Gly Gln Gly Ser Val Ser Ile
               165             170             175
```

```
Pro Gly Thr Met Gly Ala Leu Tyr Ile Glu Arg Pro Ala Asp Val Glu
             180             185             190

Glu Gly Phe Ser Ile Gln Ala Pro Leu Val Tyr His Phe Gly Ser Thr
             195             200             205

Thr Pro Gly Thr Asn Ile Lys Leu Tyr Asn Lys Ile Thr Ser Arg Leu
    210             215             220

Ala Asp Val Phe Asn Gln Arg Cys Glu Val Asn Arg Arg His Leu
225             230             235
```

```
<210> 1238
<211> 315
<212> PRT
<213> Homo sapiens

<400> 1238
Leu Leu Thr Arg Asn Met Asp Arg Leu Leu Arg Leu Gly Gly Gly Met
  1           5               10              15

Pro Gly Leu Gly Gln Gly Pro Pro Thr Asp Ala Pro Ala Val Asp Thr
             20              25              30

Ala Glu Gln Val Tyr Ile Ser Ser Leu Ala Leu Leu Lys Met Leu Lys
             35              40              45

His Gly Arg Ala Gly Val Pro Met Glu Val Met Gly Leu Met Leu Gly
        50              55              60

Glu Phe Val Asp Asp Tyr Thr Val Arg Val Ile Asp Val Phe Ala Met
65              70              75              80

Pro Gln Ser Gly Thr Gly Val Ser Val Glu Ala Val Asp Pro Val Phe
             85              90              95

Gln Ala Lys Met Leu Asp Met Leu Lys Gln Thr Gly Arg Pro Glu Met
             100             105             110

Val Val Gly Trp Tyr His Ser His Pro Gly Phe Gly Cys Trp Leu Ser
             115             120             125

Gly Val Asp Ile Asn Thr Gln Gln Ser Phe Glu Ala Leu Ser Glu Arg
             130             135             140

Ala Val Ala Val Val Val Asp Pro Ile Gln Ser Val Lys Gly Lys Val
145             150             155             160
```

Val Ile Asp Ala Phe Arg Leu Ile Asn Ala Asn Met Met Val Leu Gly
          165   170   175

His Glu Pro Arg Gln Thr Thr Ser Asn Leu Gly His Leu Asn Lys Pro
          180   185   190

Ser Ile Gln Ala Leu Ile His Gly Leu Asn Arg His Tyr Tyr Ser Ile
          195   200   205

Thr Ile Asn Tyr Arg Lys Asn Glu Leu Glu Gln Lys Met Leu Leu Asn
    210   215   220

Leu His Lys Lys Ser Trp Met Glu Gly Leu Thr Leu Gln Asp Tyr Ser
225   230   235   240

Glu His Cys Lys His Asn Glu Ser Val Val Lys Glu Met Leu Glu Leu
          245   250   255

Ala Lys Asn Tyr Asn Lys Ala Val Glu Glu Glu Asp Lys Met Thr Pro
          260   265   270

Glu Gln Leu Ala Ile Lys Asn Val Gly Lys Gln Asp Pro Lys Arg His
          275   280   285

Leu Glu Glu His Val Asp Val Leu Met Thr Ser Asn Ile Val Gln Cys
    290   295   300

Leu Ala Ala Met Leu Asp Thr Val Val Phe Lys
305   310   315

<210> 1239
<211> 283
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (253)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (259)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1239
Leu Arg Gly Ser Asp Ala Gly Ser Gly Asp Glu Val Ala Ala Gly Gly
    1   5   10   15

```
Ser Arg Ala Val Ala Ala Ala Ala Leu Pro Arg Ser Gly Arg Val Gly
            20              25              30

Ala Ser Gly Pro Ala Ser Ala Pro Leu His Pro Arg Leu Ala Glu Pro
            35              40              45

Gly Phe Ser Ala Ala Ala Gly Leu Val Arg Arg Ser Gln Val Arg Gly
    50              55              60

Val His Pro Leu Gly Arg Val Leu Gly Ala Arg Leu Gly Gln Arg Val
65              70              75              80

Val Leu Val Ala Leu Ala Gly Arg Gly Ala Ala Ala Val Pro Ala Leu
            85              90              95

His Ala Arg Gln Leu Pro Ala Arg Leu Gln Leu Arg Arg Leu Arg Thr
            100             105             110

Ala Val His Cys Ala Leu Leu Pro Pro Gly Glu Trp Ala Asp Leu Phe
            115             120             125

Gln Ala Ala Gly Ala Lys Tyr Val Val Leu Thr Thr Lys His His Glu
    130             135             140

Gly Phe Thr Asn Trp Pro Ser Pro Val Ser Trp Asn Trp Asn Ser Lys
145             150             155             160

Asp Val Gly Pro His Arg Asp Leu Val Gly Glu Leu Gly Thr Ala Leu
            165             170             175

Arg Lys Arg Asn Ile Arg Tyr Gly Leu Tyr His Ser Leu Leu Glu Trp
            180             185             190

Phe His Pro Leu Tyr Leu Leu Asp Lys Lys Asn Gly Phe Lys Thr Gln
            195             200             205

His Phe Val Ser Ala Lys Thr Met Pro Glu Leu Tyr Asp Leu Val Asn
    210             215             220

Ser Tyr Lys Pro Asp Leu Ile Trp Ser Asp Gly Glu Trp Glu Cys Pro
225             230             235             240

Asp Thr Tyr Trp Asn Ser Thr Asn Phe Leu Ser Trp Xaa Tyr Asn Asp
            245             250             255

Ser Pro Xaa Lys Val Ser Val Gly Ser Leu Arg Ala Arg Thr Leu Phe
            260             265             270

Tyr Ser Thr Trp Glu Leu Ser Val Cys His Met
            275             280
```

```
<210> 1240
<211> 180
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (175)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1240
Thr Thr Ser Xaa Glu Arg Xaa Leu Thr Gly Pro Glu Pro Leu Arg Arg
 1               5                   10                  15

Arg Arg Leu Cys Ser Arg Gln Leu Ala Pro Ala Ala Met Pro Thr Thr
            20                  25                  30

Ile Glu Arg Glu Phe Glu Glu Leu Asp Thr Gln Arg Arg Trp Gln Pro
            35                  40                  45

Leu Tyr Leu Glu Ile Arg Asn Glu Ser His Asp Tyr Pro His Arg Val
    50              55                  60

Ala Lys Phe Pro Glu Asn Arg Asn Arg Asn Arg Tyr Arg Asp Val Ser
65                  70                  75                  80

Pro Tyr Asp His Ser Arg Val Lys Leu Gln Asn Ala Glu Asn Asp Tyr
                85                  90                  95

Ile Asn Ala Ser Leu Val Asp Ile Glu Glu Ala Gln Arg Ser Tyr Ile
            100                 105                 110

Leu Thr Gln Gly Pro Leu Pro Asn Thr Cys Cys His Phe Trp Leu Met
            115                 120                 125

Val Trp Gln Gln Lys Thr Lys Ala Val Val Met Leu Asn Arg Ile Val
    130                 135                 140

Glu Lys Glu Ser Ser Gly Glu Thr Glu Gln Tyr Leu Thr Phe Ile Ile
```

```
            145                    150                    155                    160
        Leu Pro Gly Gln Asn Leu Glu Ser Leu Glu Ser Thr Ser Phe Xaa Ser
                        165                    170                    175
        Gln Phe Leu Gly
                    180



        <210> 1241
        <211> 19
        <212> PRT
        <213> Homo sapiens

        <400> 1241
        Ser Arg Asp Gly Val Ser Pro His Trp Pro Gly Trp Ser Gln Thr Pro
          1               5                   10                  15

        Asp Leu Lys



        <210> 1242
        <211> 133
        <212> PRT
        <213> Homo sapiens

        <400> 1242
        Ala Phe Asp Leu Cys Tyr Leu Tyr Ser Trp Asp Leu Ile Arg Lys Met
          1               5                   10                  15

        Cys Phe Val Val Leu Asp Lys Leu Phe His Pro Leu Phe Pro Pro Gln
                        20                  25                  30

        Asn Thr His Thr Glu Gln Thr Pro Phe His Lys Ser Pro His Ile His
                    35                  40                  45

        Trp Gln Ser Pro Phe Ala Ser Trp Ser Pro Cys Val Pro Pro Lys Ser
                50                  55                  60

        Ile Met Phe Glu Ser Leu Trp Trp Met Leu Trp Gly Lys Val Met Ile
         65                  70                  75                  80

        Tyr Thr Glu Ala Thr Ala Lys Ser Val Val Gln Pro Leu Ser Pro Val
                        85                  90                  95

        Lys Tyr Cys Ile Thr Pro Phe Gly Thr Thr Glu Lys Thr Val Ala Phe
                        100                 105                 110
```

```
Leu Gln Tyr Ser Ser Leu Leu His His Phe Cys Ile Asn Val Glu Thr
        115                 120                 125

Lys His Gln Asn Leu
        130
```

```
<210> 1243
<211> 70
<212> PRT
<213> Homo sapiens

<400> 1243
Pro Ala Arg Cys Met Pro Gly Pro Trp Pro Tyr Leu Ala Ala Ser
 1               5                   10                  15

Cys Asp Ser Glu Ile His Pro Ser Arg Trp Gln Leu Leu Gly Leu Asn
                20                  25                  30

Leu Leu Glu Lys Lys Val Pro Ser Gln Glu Asn Ser Phe Tyr Ser Gly
            35                  40                  45

Arg Asn Ala Ser Glu Thr Pro Gln Gly Ser Leu Asn Thr Gln Leu Gln
        50                  55                  60

Gly Arg Ala Cys Gly Gly
 65                  70
```

```
<210> 1244
<211> 51
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1244
Val Tyr Thr Leu Pro Ser His Lys Pro Ile Phe Lys Arg Ser Asn Ala
 1               5                   10                  15

Met Thr Ala Ile Leu Gln Glu Lys Lys Lys Leu Tyr Ser Cys Gly Asp
                20                  25                  30

Val Pro His Thr Xaa His Gln Leu Gln Gly Val Cys Pro Leu Gln Thr
            35                  40                  45
```

Pro Glu Pro
    50

<210> 1245
<211> 111
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1245
Asn Ala Val Phe Ser Ile Thr Asp Leu Ser Leu Pro Asn Tyr Leu Met
 1   5   10   15

Ala Ser Ser Val Gly Leu Leu Pro Thr Gln Leu Leu Asn Ser Tyr Leu
           20   25   30

Gly Thr Thr Leu Arg Thr Met Glu Asp Val Ile Ala Glu Gln Ser Xaa
      35   40   45

Ser Gly Tyr Phe Val Phe Cys Leu Gln Ile Ile Ile Ser Ile Gly Leu
    50   55   60

Met Phe Tyr Val Val His Arg Ala Gln Val Glu Leu Asn Ala Ala Ile
 65   70   75   80

Val Ala Cys Glu Met Gly Thr Gly Asn Leu Leu Trp Leu Lys Gly Asn
           85   90   95

Xaa Pro Asn Thr Ser Gly Leu Phe His Ser Thr Thr Arg Gly Pro
       100   105   110

<210> 1246
<211> 223
<212> PRT
<213> Homo sapiens

<220>
<221> SITE

<222> (184)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (195)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (198)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (216)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1246

```
Lys Gln Ala Gly Cys Ser Ala Ala Pro Gly Ala Val Pro Pro Pro Glu
 1               5               10              15

Ala Asp Ser Thr Ser Ala Gly Met Ser Arg Arg Pro Cys Ser Cys Ala
            20              25              30

Leu Arg Pro Pro Arg Cys Ser Cys Ser Ala Ser Pro Ser Ala Val Thr
        35              40              45

Ala Ala Gly Arg Pro Arg Pro Ser Asp Ser Cys Lys Glu Glu Ser Ser
    50              55              60

Thr Leu Ser Val Lys Met Lys Cys Asp Phe Asn Cys Asn His Val His
65              70              75              80

Ser Gly Leu Lys Leu Val Lys Pro Asp Asp Ile Gly Arg Leu Val Ser
            85              90              95

Tyr Thr Pro Ala Tyr Leu Glu Gly Ser Cys Lys Asp Cys Ile Lys Asp
        100             105             110

Tyr Glu Arg Leu Ser Cys Ile Gly Ser Pro Ile Val Ser Pro Arg Ile
        115             120             125

Val Glu Leu Glu Thr Glu Ser Lys Arg Leu His Asn Lys Glu Asn Gln
    130             135             140

His Val Gln Gln Thr Leu Asn Ser Thr Asn Glu Ile Glu Ala Leu Glu
145             150             155             160

Thr Ser Arg Leu Tyr Glu Asp Ser Ala Ile Pro Gln Phe Leu Tyr Lys
            165             170             175
```

```
Val Ala Ser Val Thr Met Lys Xaa Val Ala Phe Trp Arg Arg Asn Ser
            180             185             190

Val Thr Xaa Tyr Asn Xaa Gly Trp Leu Gln Ile Gln Gly Pro Asp Pro
            195             200             205

Ile Phe Pro Thr Lys Asn Phe Xaa Leu Ala Arg Ser Phe Asn Phe
            210             215             220
```

<210> 1247
<211> 54
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1247
```
Leu Glu Lys Lys Asp Ile Xaa Asn Met Leu Met Trp Arg Ser Pro Ser
  1             5               10              15

Tyr Pro Lys Gly Glu Lys Gln Gly Lys Asp Pro Leu His Ser Lys Phe
            20              25              30

Pro Leu Gly Ser Pro Arg Ala His Cys Pro Gln Met His Ile Ile Ser
            35              40              45

Ala Glu Ile Gln Lys Pro
            50
```

<210> 1248
<211> 77
<212> PRT
<213> Homo sapiens

<400> 1248
```
Arg Phe Leu Ser Phe Val Phe Gly Leu Asn Phe Ser Pro Arg Ser Leu
  1             5               10              15

Phe Val Ser Ser Phe Cys Phe Ser Thr Val Leu Val Ile Thr Leu Cys
            20              25              30

Trp Arg Glu Pro Val Ser Leu Trp Pro Pro Leu Pro Lys Leu Lys Gln
            35              40              45
```

```
Gly Pro Ile Ile Met Ser Val Ser Arg Thr Val Pro Trp Ser Ser His
     50              55              60

Ile Pro Gly Pro Arg Leu Gly Pro Pro Ser Cys Val Leu
 65          70              75
```

<210> 1249
<211> 100
<212> PRT
<213> Homo sapiens

<400> 1249
```
Asn Asn Ile Cys Ser Gln Met Val Phe Leu Ala Val Ser Pro Val Val
 1           5               10              15

Ala Met Phe Arg Val Val Val Leu Ile Tyr Leu Gly Val His Lys Thr
             20              25              30

Tyr Leu Ala Gly Leu Phe Lys Lys Phe Arg Phe Leu Ala Leu Tyr Pro
         35              40              45

Gly Ile Ala Ser Gly Gly Met Gly Cys Gly Pro Gly Val Ile Thr Phe
     50              55              60

Ile Asn Ser Gly Ser Glu Thr Thr Glu Arg Asp Cys Phe Ile Glu Trp
 65              70              75              80

Glu Val Pro Arg Arg Lys Tyr Asn Ser Val Leu Ser Gly Gly Lys Trp
             85              90              95

Thr Leu Cys Thr
             100 .
```

<210> 1250
<211> 47
<212> PRT
<213> Homo sapiens

<400> 1250
```
Ser Asn Leu Met Leu Thr Asn Leu Leu Cys Leu Leu Cys Cys Phe Leu
 1           5               10              15

Val Pro Ala Ser Ala Ala Leu Gln Met Gln Thr Ile Leu Ser Tyr Leu
             20              25              30

Ala Gly Leu Leu Phe Tyr Phe Val Gly Trp Met Leu Pro Ser Ser
```

                    35   40   45

```
<210> 1251
<211> 193
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1251
Lys Pro Gly Ser Thr Gly Xaa Val Arg Glu Gly Gln Pro Phe Glu Tyr
 1               5                  10                  15

Phe Val Tyr Gly Ala Ala Cys Ser Glu Val Glu Ile Asp Cys Leu Thr
            20                  25                  30

Gly Asp His Lys Asn Ile Arg Thr Asp Ile Val Met Asp Val Gly Cys
            35                  40                  45

Ser Ile Asn Pro Ala Ile Asp Ile Gly Gln Ile Glu Gly Ala Phe Ile
        50                  55                  60

Gln Gly Met Xaa Leu Tyr Thr Ile Glu Glu Leu Asn Tyr Ser Pro Gln
65                  70                  75                  80

Gly Ile Leu His Thr Arg Gly Pro Asp Gln Tyr Lys Ile Pro Ala Ile
                85                  90                  95

Cys Asp Met Pro Thr Glu Leu His Ile Ala Leu Leu Pro Pro Ser Gln
            100                 105                 110

Asn Ser Asn Thr Leu Tyr Ser Ser Lys Gly Leu Gly Glu Ser Gly Val
            115                 120                 125

Phe Leu Gly Cys Ser Val Phe Phe Ala Ile His Asp Ala Val Ser Ala
        130                 135                 140

Ala Arg Gln Glu Arg Gly Leu His Gly Pro Leu Thr Leu Asn Ser Pro
145                 150                 155                 160

Leu Thr Pro Glu Lys Ile Arg Met Ala Cys Glu Asp Lys Phe Thr Lys
```

```
              165                170                175
    Met Ile Pro Arg Asp Glu Pro Gly Ser Tyr Val Pro Trp Asn Val Pro
                180                185                190

    Ile
```

<210> 1252
<211> 51
<212> PRT
<213> Homo sapiens

<400> 1252
```
    Gly Ser Ser Lys Gly Ile Phe Leu Leu Phe Ser Leu Phe Leu Gly Cys
     1               5                10                15

    Ser Lys Phe Ser Arg Ser Ser Ser Arg Ile Arg Lys Arg Ser Ile Val
                20                25                30

    Arg Asn Arg Phe Trp Val Leu Leu Lys Phe Ala Cys Gln His Cys Ile
                35                40                45

    Thr Phe Pro
           50
```

<210> 1253
<211> 696
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (541)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1253
```
    His Glu Arg Glu Xaa His Gly Leu Gly Ala Asp Cys Arg Ala Gly Arg
     1               5                10                15

    Leu Val Val Met Pro Gly Phe Leu Val Arg Ile Leu Leu Leu Leu Leu
                20                25                30
```

```
Val Leu Leu Leu Leu Gly Pro Thr Arg Gly Leu Arg Asn Ala Thr Gln
        35                  40                  45

Arg Met Phe Glu Ile Asp Tyr Ser Arg Asp Ser Phe Leu Lys Asp Gly
        50                  55                  60

Gln Pro Phe Arg Tyr Ile Ser Gly Ser Ile His Tyr Ser Arg Val Pro
65                      70                  75                  80

Arg Phe Tyr Trp Lys Asp Arg Leu Leu Lys Met Lys Met Ala Gly Leu
                85                  90                  95

Asn Ala Ile Gln Thr Tyr Val Pro Trp Asn Phe His Glu Pro Trp Pro
                100                 105                 110

Gly Gln Tyr Gln Phe Ser Glu Asp His Asp Val Glu Tyr Phe Leu Arg
                115                 120                 125

Leu Ala His Glu Leu Gly Leu Leu Val Ile Leu Arg Pro Gly Pro Tyr
        130                 135                 140

Ile Cys Ala Glu Trp Glu Met Gly Gly Leu Pro Ala Trp Leu Leu Glu
145                 150                 155                 160

Lys Glu Ser Ile Leu Leu Arg Ser Ser Asp Pro Asp Tyr Leu Ala Ala
                165                 170                 175

Val Asp Lys Trp Leu Gly Val Leu Leu Pro Lys Met Lys Pro Leu Leu
                180                 185                 190

Tyr Gln Asn Gly Gly Pro Val Ile Thr Val Gln Val Glu Asn Glu Tyr
                195                 200                 205

Gly Ser Tyr Phe Ala Cys Asp Phe Asp Tyr Leu Arg Phe Leu Gln Lys
        210                 215                 220

Arg Phe Arg His His Leu Gly Asp Asp Val Val Leu Phe Thr Thr Asp
225                 230                 235                 240

Gly Ala His Lys Thr Phe Leu Lys Cys Gly Ala Leu Gln Gly Leu Tyr
                245                 250                 255

Thr Thr Val Asp Phe Gly Thr Gly Ser Asn Ile Thr Asp Ala Phe Leu
                260                 265                 270

Ser Gln Arg Lys Cys Glu Pro Lys Gly Pro Leu Ile Asn Ser Glu Phe
        275                 280                 285

Tyr Thr Gly Trp Leu Asp His Trp Gly Gln Pro His Ser Thr Ile Lys
        290                 295                 300
```

Thr Glu Ala Val Ala Ser Ser Leu Tyr Asp Ile Leu Ala Arg Gly Ala
305   310   315   320

Ser Val Asn Leu Tyr Met Phe Ile Gly Gly Thr Asn Phe Ala Tyr Trp
                325   330   335

Asn Gly Ala Asn Ser Pro Tyr Ala Ala Gln Pro Thr Ser Tyr Asp Tyr
            340   345   350

Asp Ala Pro Leu Ser Glu Ala Gly Asp Leu Thr Glu Lys Tyr Phe Ala
        355   360   365

Leu Arg Asn Ile Ile Gln Lys Phe Glu Lys Val Pro Glu Gly Pro Ile
    370   375   380

Pro Pro Ser Thr Pro Lys Phe Ala Tyr Gly Lys Val Thr Leu Glu Lys
385   390   395   400

Leu Lys Thr Val Gly Ala Ala Leu Asp Ile Leu Cys Pro Ser Gly Pro
            405   410   415

Ile Lys Ser Leu Tyr Pro Leu Thr Phe Ile Gln Val Lys Gln His Tyr
            420   425   430

Gly Phe Val Leu Tyr Arg Thr Thr Leu Pro Gln Asp Cys Ser Asn Pro
        435   440   445

Ala Pro Leu Ser Ser Pro Leu Asn Gly Val His Asp Arg Ala Tyr Val
450   455   460

Ala Val Asp Gly Ile Pro Gln Gly Val Leu Glu Arg Asn Asn Val Ile
465   470   475   480

Thr Leu Asn Ile Thr Gly Lys Ala Gly Ala Thr Leu Asp Leu Leu Val
            485   490   495

Glu Asn Met Gly Arg Val Asn Tyr Gly Ala Tyr Ile Asn Asp Phe Lys
            500   505   510

Gly Leu Val Ser Asn Leu Thr Leu Ser Ser Asn Ile Leu Thr Asp Trp
        515   520   525

Thr Ile Phe Pro Leu Asp Thr Glu Asp Ala Val Arg Xaa His Leu Gly
    530   535   540

Gly Trp Gly His Arg Asp Ser Gly His His Asp Glu Ala Trp Ala His
545   550   555   560

Asn Ser Ser Asn Tyr Thr Leu Pro Ala Phe Tyr Met Gly Asn Phe Ser
            565   570   575

```
Ile Pro Ser Gly Ile Pro Asp Leu Pro Gln Asp Thr Phe Ile Gln Phe
            580             585                 590

Pro Gly Trp Thr Lys Gly Gln Val Trp Ile Asn Gly Phe Asn Leu Gly
            595             600                 605

Arg Tyr Trp Pro Ala Arg Gly Pro Gln Leu Thr Leu Phe Val Pro Gln
    610             615                 620

His Ile Leu Met Thr Ser Ala Pro Asn Thr Ile Thr Val Leu Glu Leu
625             630                 635                 640

Glu Trp Ala Pro Cys Ser Ser Asp Asp Pro Glu Leu Cys Ala Val Thr
            645             650                 655

Phe Val Asp Arg Pro Val Ile Gly Ser Ser Val Thr Tyr Asp His Pro
            660             665                 670

Ser Lys Pro Val Glu Lys Arg Leu Met Pro Pro Pro Gln Lys Asn
            675             680                 685

Lys Asp Ser Trp Leu Asp His Val
    690             695
```

```
<210> 1254
<211> 400
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (241)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (372)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1254
Thr Ser Ser Pro Ser Leu Ala Ser Asp Leu Leu Leu Asn Met Gly Ala
  1             5                 10                  15

Phe Leu Asp Lys Pro Lys Thr Glu Lys His Asn Ala His Gly Ala Gly
            20              25                  30

Asn Gly Leu Arg Tyr Gly Leu Ser Ser Met Gln Gly Trp Arg Val Glu
        35              40                  45
```

```
Met Glu Asp Ala His Thr Ala Val Val Gly Ile Pro His Gly Leu Glu
    50                  55                  60

Asp Trp Ser Phe Phe Ala Val Tyr Asp Gly His Ala Gly Ser Arg Val
    65                  70                  75                  80

Ala Asn Tyr Cys Ser Thr His Leu Leu Glu His Ile Thr Thr Asn Glu
                85                  90                  95

Asp Phe Arg Ala Ala Gly Lys Ser Gly Ser Ala Leu Glu Leu Ser Val
            100                 105                 110

Glu Asn Val Lys Asn Gly Ile Arg Thr Gly Phe Leu Lys Ile Asp Glu
            115                 120                 125

Tyr Met Arg Asn Phe Ser Asp Leu Arg Asn Gly Met Asp Arg Ser Gly
    130                 135                 140

Ser Thr Ala Val Gly Val Met Ile Ser Pro Lys His Ile Tyr Phe Ile
145                 150                 155                 160

Asn Cys Gly Asp Ser Arg Ala Val Leu Tyr Arg Asn Gly Gln Val Cys
                165                 170                 175

Phe Ser Thr Gln Asp His Lys Pro Cys Asn Pro Arg Glu Lys Glu Arg
            180                 185                 190

Ile Gln Asn Ala Gly Gly Ser Val Met Ile Gln Arg Val Asn Gly Ser
            195                 200                 205

Leu Ala Val Ser Arg Ala Leu Gly Asp Tyr Asp Tyr Lys Cys Val Asp
    210                 215                 220

Gly Lys Gly Pro Thr Glu Gln Leu Val Ser Pro Glu Pro Glu Val Tyr
225                 230                 235                 240

Xaa Ile Leu Arg Ala Glu Glu Asp Glu Phe Ile Ile Leu Ala Cys Asp
                245                 250                 255

Gly Ile Trp Asp Val Met Ser Asn Glu Glu Leu Cys Glu Tyr Val Lys
            260                 265                 270

Ser Arg Leu Glu Val Ser Asp Asp Leu Glu Asn Val Cys Asn Trp Val
    275                 280                 285

Val Asp Thr Cys Leu His Lys Gly Ser Arg Asp Asn Met Ser Ile Val
    290                 295                 300

Leu Val Cys Phe Ser Asn Ala Pro Lys Val Ser Asp Glu Ala Val Lys
305                 310                 315                 320
```

```
Lys Asp Ser Glu Leu Asp Lys His Leu Glu Ser Arg Val Glu Glu Ile
              325               330               335

Met Glu Lys Ser Gly Glu Glu Gly Met Pro Asp Leu Ala His Val Met
              340               345               350

Arg Ile Leu Ser Ala Glu Asn Ile Pro Asn Leu Pro Pro Gly Gly Gly
          355               360               365

Leu Ala Gly Xaa Arg Asn Val Ile Glu Ala Val Tyr Ser Arg Leu Asn
      370               375               380

Pro His Arg Glu Ser Asp Gly Gly Ala Gly Asp Leu Glu Asp Pro Trp
385               390               395               400
```

<210> 1255
<211> 155
<212> PRT
<213> Homo sapiens

<400> 1255

```
Val Ala Arg Ser Ala Pro Pro Asp Gly Ala Val Cys Ala Gly Pro Gly
 1               5                10               15

Ser Arg Arg Thr Glu Met Ala Glu Gln Ser Asp Glu Ala Val Lys Tyr
              20               25               30

Tyr Thr Leu Glu Glu Ile Gln Lys His Asn His Ser Lys Ser Thr Trp
          35               40               45

Leu Ile Leu His His Lys Val Tyr Asp Leu Thr Lys Phe Leu Glu Glu
      50               55               60

His Pro Gly Gly Glu Glu Val Leu Arg Glu Gln Ala Gly Gly Asp Ala
65               70               75               80

Thr Glu Asn Phe Glu Asp Val Gly His Ser Thr Asp Ala Arg Glu Met
              85               90               95

Ser Lys Thr Phe Ile Ile Gly Glu Leu His Pro Asp Asp Arg Pro Lys
              100              105              110

Leu Asn Lys Pro Pro Glu Thr Leu Ile Thr Thr Ile Asp Ser Ser Ser
          115              120              125
```

```
Ser Trp Trp Thr Asn Trp Val Ile Pro Ala Ile Ser Ala Val Ala Val
    130                 135                 140

Ala Leu Met Tyr Arg Leu Tyr Met Ala Glu Asp
145                 150                 155



<210> 1256
<211> 378
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (184)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1256
Gln Ala Phe Ala Lys Ser Tyr Leu Gly Asp Thr Ile Glu Gly Thr Pro
    1                 5                   10                  15

Ala Gly Thr Gly Pro Glu Phe Pro Gly Arg Pro Thr Arg Pro Arg Arg
                20              25              30

Lys Pro Thr Ala Ala Trp Ser Ala Lys Lys Ser Phe Gln Val Ser Arg
            35              40                  45

Thr Gly Leu Phe Leu Ser Lys Ser Gly Ser Thr Leu Thr Met Trp Leu
    50                  55                  60

Tyr Leu Ala Ala Phe Val Gly Leu Tyr Tyr Leu Leu His Trp Tyr Arg
65                  70                  75                  80

Glu Arg Gln Val Val Ser His Leu Gln Asp Lys Tyr Val Phe Ile Thr
                85                  90                  95

Gly Cys Asp Ser Gly Phe Gly Asn Leu Leu Ala Arg Gln Leu Asp Ala
                100             105                 110

Arg Gly Leu Xaa Val Leu Ala Ala Cys Leu Thr Glu Lys Gly Ala Glu
            115             120                 125

Gln Leu Arg Gly Gln Thr Ser Asp Arg Leu Glu Thr Val Thr Leu Asp
    130                 135                 140
```

```
Val Thr Lys Met Glu Ser Ile Ala Ala Ala Thr Gln Trp Val Lys Glu
145             150             155             160

His Val Gly Asp Arg Gly Leu Trp Gly Leu Val Asn Asn Ala Gly Ile
                165             170             175

Leu Thr Pro Ile Thr Leu Cys Xaa Trp Leu Asn Thr Glu Asp Ser Met
                180             185             190

Asn Met Leu Lys Val Asn Leu Ile Gly Val Ile Gln Val Thr Leu Ser
            195             200             205

Met Leu Pro Leu Val Arg Arg Ala Arg Gly Arg Ile Val Asn Val Ser
        210             215             220

Ser Ile Leu Gly Arg Val Ala Phe Phe Val Gly Gly Tyr Cys Val Ser
225             230             235             240

Lys Tyr Gly Val Glu Ala Phe Ser Asp Ile Leu Arg Arg Glu Ile Gln
                245             250             255

His Phe Gly Val Lys Ile Ser Ile Val Glu Pro Gly Tyr Phe Arg Thr
                260             265             270

Gly Met Thr Asn Met Thr Gln Ser Leu Glu Arg Met Lys Gln Ser Trp
                275             280             285

Lys Glu Ala Pro Lys His Ile Lys Glu Thr Tyr Gly Gln Gln Tyr Phe
        290             295             300

Asp Ala Leu Tyr Asn Ile Met Lys Glu Gly Leu Leu Asn Cys Ser Thr
305             310             315             320

Asn Leu Asn Leu Val Thr Asp Cys Met Glu His Ala Leu Thr Ser Val
                325             330             335

His Pro Arg Thr Arg Tyr Ser Ala Gly Trp Asp Ala Lys Phe Phe Phe
                340             345             350

Ile Pro Leu Ser Tyr Leu Pro Thr Ser Leu Ala Asp Tyr Ile Leu Thr
                355             360             365

Arg Ser Trp Pro Lys Pro Ala Gln Ala Val
370             375
```

<210> 1257
<211> 75
<212> PRT
<213> Homo sapiens

```
<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1257
Lys Pro Gln Pro Leu Ala Tyr Ser Ser Phe Asn Thr Arg Asp Leu Trp
 1               5               10              15

Leu Ile Trp Gly Arg Lys Thr Leu Lys Val Ile Ser Leu Gly Gln Arg
             20              25              30

Pro Tyr Cys Thr Arg Gly Lys Lys Tyr Ile Leu His Leu Leu Leu Leu
         35              40              45

Gln Leu Cys Leu Lys Phe Ile Cys Leu Val Ile Leu Ser Thr Xaa Thr
     50              55              60

Asn Phe Leu Val Tyr Phe Lys His Leu Val Gly
 65              70              75


<210> 1258
<211> 261
<212> PRT
<213> Homo sapiens

<400> 1258
Pro Ser Gly Ile Pro Gly Ser Thr His Ala Ser Glu Arg Lys Leu Pro
 1               5               10              15

Glu Glu His Ala Arg Phe Tyr Ser Ala Glu Ile Ser Leu Ala Leu Asn
             20  .            25              30

Tyr Leu His Glu Arg Gly Ile Ile Tyr Arg Asp Leu Lys Leu Asp Asn
         35              40              45

Val Leu Leu Asp Ser Glu Gly His Ile Lys Leu Thr Asp Tyr Gly Met
     50              55              60

Cys Lys Glu Gly Leu Arg Pro Gly Asp Thr Thr Ser Thr Phe Cys Gly
 65              70              75              80

Thr Pro Asn Tyr Ile Ala Pro Glu Ile Leu Arg Gly Glu Asp Tyr Gly
             85              90              95

Phe Ser Val Asp Trp Trp Ala Leu Gly Val Leu Met Phe Glu Met Met
             100             105             110
```

```
Ala Gly Arg Ser Pro Phe Asp Ile Val Gly Ser Ser Asp Asn Pro Asp
        115             120             125

Gln Asn Thr Glu Asp Tyr Leu Phe Gln Val Ile Leu Glu Lys Gln Ile
        130             135             140

Arg Ile Pro Arg Ser Leu Ser Val Lys Ala Ala Ser Val Leu Lys Ser
145             150             155             160

Phe Leu Asn Lys Asp Pro Lys Glu Arg Leu Gly Cys His Pro Gln Thr
            165             170             175

Gly Phe Ala Asp Ile Gln Gly His Pro Phe Phe Arg Asn Val Asp Trp
            180             185             190

Asp Met Met Glu Gln Lys Gln Val Val Pro Pro Phe Lys Pro Asn Ile
        195             200             205

Ser Gly Glu Phe Gly Leu Asp Asn Phe Asp Ser Gln Phe Thr Asn Glu
        210             215             220

Pro Val Gln Leu Thr Pro Asp Asp Asp Asp Ile Val Arg Lys Ile Asp
225             230             235             240

Gln Ser Glu Phe Glu Gly Phe Glu Tyr Ile Asn Pro Leu Leu Met Ser
            245             250             255

Ala Glu Glu Cys Val
            260
```

```
<210> 1259
<211> 115
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (114)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1259
Phe Gly Xaa Gly Ala Leu Leu Lys Leu Ile Phe Pro Asp Gly Ala Phe
  1           5               10              15
```

```
Glu Ser Glu Asn Arg Ala Leu Ile Asn Val Gln Met Leu Asn Asn Ser
             20                  25              30

Gly Phe Ala Arg Gly Ile Ile Glu Glu Phe Gln Asn Asn Asn Asp Leu
         35              40              45

Glu Leu Gln Gln Lys Cys Ile Asn Val Leu Ser Thr Tyr Ala Met Ile
         50              55              60

Gln Gly Gln Ile Asp Ala Asn Lys Glu Ile Gly Gln Phe Phe Ile Gln
65              70              75              80

Thr Leu Thr Gln Leu Asn Val Arg Pro Glu Ile Leu Ile Glu Met Thr
             85              90                  95

Asn Ser Leu Phe Gln Phe Thr Gly Met Pro Leu Thr Ala Ile Met Glu
             100             105             110

Pro Xaa Leu
        115
```

<210> 1260
<211> 296
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (124)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (247)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (270)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (282)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1260

```
Arg Pro Thr Arg Pro Arg His Ala Trp Ala Glu Leu Arg Val Val Ala
 1               5                   10                  15

Met Ala Ala Ser Gly Ala Val Glu Pro Gly Pro Pro Gly Ala Ala Val
            20                  25                  30

Ala Pro Ser Pro Ala Pro Ala Pro Pro Pro Ala Pro Asp His Leu Phe
        35                  40                  45

Arg Pro Ile Ser Ala Glu Asp Glu Glu Gln Xaa Pro Thr Glu Ile Glu
    50                  55                  60

Ser Leu Cys Met Asn Cys Tyr Cys Asn Gly Met Thr Arg Leu Leu Leu
65                  70                  75                  80

Thr Lys Ile Pro Phe Phe Arg Glu Ile Ile Val Ser Ser Phe Ser Cys
                85                  90                  95

Glu His Cys Gly Trp Asn Asn Thr Glu Ile Gln Ser Ala Gly Arg Ile
            100                 105                 110

Gln Asp Gln Gly Val Arg Tyr Thr Leu Ser Val Xaa Ala Leu Glu Asp
        115                 120                 125

Met Asn Arg Glu Val Val Lys Thr Asp Ser Ala Ala Thr Arg Ile Pro
    130                 135                 140

Glu Leu Asp Phe Glu Ile Pro Ala Phe Ser Gln Lys Gly Ala Leu Thr
145                 150                 155                 160

Thr Val Glu Gly Leu Ile Thr Arg Ala Ile Ser Gly Leu Glu Gln Asp
                165                 170                 175

Gln Pro Ala Arg Arg Ala Asn Lys Asp Ala Thr Ala Glu Arg Ile Asp
            180                 185                 190

Glu Phe Ile Val Lys Leu Lys Glu Leu Lys Gln Val Ala Ser Pro Phe
        195                 200                 205

Thr Leu Ile Ile Asp Asp Pro Ser Gly Asn Ser Phe Val Glu Asn Pro
    210                 215                 220

His Ala Pro Gln Lys Asp Asp Ala Leu Val Ile Thr His Tyr Asn Arg
225                 230                 235                 240

Thr Arg Gln Gln Glu Glu Xaa Leu Gly Leu Gln Glu Glu Ala Pro Ala
                245                 250                 255
```

```
Glu Lys Pro Glu Glu Glu Asp Leu Arg Asn Glu Val Leu Xaa Phe Ser
            260             265             270

Thr Asn Cys Pro Glu Cys Asn Val Pro Xaa Gln Thr Asn Met Lys Leu
            275             280             285

Met Val Val Leu Phe Ala Trp Lys
            290             295
```

```
<210> 1261
<211> 53
<212> PRT
<213> Homo sapiens

<400> 1261
Gly Gly Arg Gly Gly Arg Ile Thr Gly Ala Arg Glu Phe Lys Thr Ser
  1             5               10              15

Leu Gly Asn Ile Val Lys Pro Ser Pro Gln Ile Ile Phe Lys Lys Leu
            20              25              30

Ala Arg His Gly Gly Ala Ala Cys Ser Pro Ser Tyr Ser Gly Gly Leu
            35              40              45

Gly Gly Arg Ile Ala
        50
```

```
<210> 1262
<211> 200
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<400> 1262
Asp Ser His Xaa Thr Xaa Xaa Pro Val Asp Pro Arg Val Arg Glu Ala
 1               5               10                  15

Gly Ile Pro Glu Phe Tyr Asp Tyr Asp Val Ala Leu Ile Lys Leu Lys
                20              25                  30

Asn Lys Leu Lys Tyr Gly Gln Thr Ile Arg Pro Ile Cys Leu Pro Cys
            35              40                  45

Thr Glu Gly Thr Thr Arg Ala Leu Arg Leu Pro Pro Thr Thr Thr Cys
        50              55                  60

Gln Gln Gln Lys Glu Glu Leu Leu Pro Ala Gln Asp Ile Lys Ala Leu
65                  70                  75                  80

Phe Val Ser Glu Glu Glu Lys Lys Leu Thr Arg Lys Glu Val Tyr Ile
                85                  90                  95

Lys Asn Gly Asp Lys Lys Gly Ser Cys Glu Arg Asp Ala Gln Tyr Ala
                100             105             110

Pro Gly Tyr Asp Lys Val Lys Asp Ile Ser Glu Val Val Thr Pro Arg
            115             120             125

Phe Leu Cys Thr Gly Gly Val Ser Pro Tyr Ala Asp Pro Asn Thr Cys
        130             135             140

Arg Gly Asp Ser Gly Gly Pro Leu Ile Val His Lys Arg Ser Arg Phe
145             150             155             160

Ile Gln Val Gly Val Ile Ser Trp Gly Val Val Asp Val Cys Lys Asn
                165             170             175

Gln Lys Arg Gln Lys Gln Val Pro Val Thr Pro Glu Thr Phe Thr Ser
            180             185             190

Thr Ser Phe Lys Cys Cys Pro Gly
        195             200


<210> 1263
<211> 110
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (81)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (90)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (94)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1263
Cys Ala Arg Pro His Cys His Gly Pro Gln Ile Tyr Ser Ser Lys Gln
  1               5              10                 15

Ser Ser His Gly Thr Phe Pro Gln Gly Ala Val Ser Pro Val Glu Glu
             20              25              30

Ser Asp Met Thr His His Thr Asp Arg Lys Ile Xaa Thr Asn Tyr Glu
         35              40              45

Lys Asn Ala Glu Gly Arg Lys Asn Ile Gly Gly Pro Ala Ala Glu Ser
     50              55              60

Arg Leu Thr Cys Arg Asp Leu Cys Trp Pro Gly Pro Val Leu Gly Ser
 65              70              75              80

Xaa Xaa His Gly Ile Lys Ser Asn Lys Xaa Thr Val Cys Xaa His Leu
             85              90              95

Thr Val Trp Glu Lys Glu Gln Ala Pro Phe Thr Gly Phe Tyr
            100             105             110


<210> 1264
<211> 151
<212> PRT
<213> Homo sapiens

<400> 1264
```

```
Phe Trp Pro Cys Arg Ala Phe Gly Ile Pro Ile Arg Val Tyr Thr His
 1               5               10              15

Glu Val Val Thr Leu Trp Tyr Arg Ser Pro Glu Val Leu Leu Gly Ser
            20              25              30

Ala Arg Tyr Ser Thr Pro Val Asp Ile Trp Ser Ile Gly Thr Ile Phe
        35              40              45

Ala Glu Leu Ala Thr Lys Lys Pro Leu Phe His Gly Asp Ser Glu Ile
    50              55              60

Asp Gln Leu Phe Arg Ile Phe Arg Ala Leu Gly Thr Pro Asn Asn Glu
65              70              75              80

Val Trp Pro Glu Val Glu Ser Leu Gln Asp Tyr Lys Asn Thr Phe Pro
            85              90              95

Lys Trp Lys Pro Gly Ser Leu Ala Ser His Val Lys Asn Leu Asp Glu
            100             105             110

Asn Gly Leu Asp Leu Leu Ser Lys Met Leu Ile Tyr Asp Pro Ala Lys
        115             120             125

Arg Ile Ser Gly Lys Met Ala Leu Asn His Pro Tyr Phe Asn Asp Leu
    130             135             140

Asp Asn Gln Ile Lys Lys Met
145             150
```

```
<210> 1265
<211> 73
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1265
Pro Glu Trp Trp Pro Asp Ser Arg Ser Pro Ser Ser Pro Arg Thr Pro
 1               5               10              15

Arg Ser Ser Ser Ser Xaa Pro Tyr Ser Pro Thr His Phe Pro Pro Pro
            20              25              30

Leu Leu Gln Ala Gly Ser Val Phe Leu Leu Val Pro Glu Ala Leu Cys
            35              40              45
```

```
Ser Ser Pro Pro Ser Glu Pro Pro Tyr Ala Gly Ser Cys Lys Ala Trp
        50                  55                  60

Leu Ser Ala Asp Gly Ser Ser Gln Asp
65                  70
```

```
<210> 1266
<211> 319
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (305)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1266
Trp Gln Ser Ile Leu Pro Phe Ile Gln His Lys Arg Ser Trp Arg Gln
 1               5                  10                  15

Ser Arg Thr Trp Cys Ser His Thr Glu Arg Ala Leu Lys Ala Val Ser
            20                  25                  30

Asp Trp Ile Asp Glu Gln Glu Lys Gly Ser Ser Glu Gln Ala Glu Ser
            35                  40                  45

Asp Asn Met Asp Val Pro Pro Glu Asp Asp Ser Lys Glu Gly Ala Gly
        50                  55                  60

Glu Gln Lys Thr Glu His Met Thr Arg Thr Leu Arg Gly Val Met Arg
65                  70                  75                  80

Val Gly Leu Val Ala Lys Gly Leu Leu Leu Lys Gly Asp Leu Asp Leu
                85                  90                  95

Glu Leu Val Leu Leu Cys Lys Glu Lys Pro Thr Thr Ala Leu Leu Asp
                100                 105                 110

Lys Val Ala Asp Asn Leu Ala Ile Gln Leu Ala Ala Val Thr Glu Asp
            115                 120                 125

Lys Tyr Glu Ile Leu Gln Ser Val Asp Asp Ala Ala Ile Val Ile Lys
        130                 135                 140

Asn Thr Lys Glu Pro Pro Leu Ser Leu Thr Ile His Leu Thr Ser Pro
145                 150                 155                 160

Val Val Arg Glu Glu Met Glu Lys Val Leu Ala Gly Glu Thr Leu Ser
```

```
                    165                  170                  175

Val Asn Asp Pro Pro Asp Val Leu Asp Arg Gln Lys Cys Leu Ala Ala
            180              185              190

Leu Ala Ser Leu Arg His Ala Lys Trp Phe Gln Ala Arg Ala Asn Gly
            195              200              205

Leu Lys Ser Cys Val Ile Val Ile Arg Val Leu Arg Asp Leu Cys Thr
    210              215              220

Arg Val Pro Thr Trp Gly Pro Leu Arg Gly Trp Pro Leu Glu Leu Leu
225              230              235              240

Cys Glu Lys Ser Ile Gly Thr Ala Asn Arg Pro Met Gly Ala Gly Glu
                245              250              255

Ala Leu Arg Arg Val Leu Glu Cys Leu Ala Ser Gly Ile Val Met Pro
            260              265              270  .

Asp Gly Ser Gly Ile Tyr Asp Pro Cys Glu Lys Glu Ala Thr Asp Ala
            275              280              285

Ile Gly His Leu Asp Arg Gln Gln Arg Glu Asp Ile Thr Gln Ser Ala
    290              295              300

Xaa Pro His Cys Gly Ser Leu Pro Ser Ala Ser Ser Ile Lys Ser
305              310              315


<210> 1267
<211> 119
<212> PRT
<213> Homo sapiens

<400> 1267
Phe Gly Arg Val Arg Pro Gln Arg Gln Ala Val Thr Leu Leu Leu Leu
    1           5               10               15

Pro Leu Ala Met Ser Thr Ser Thr Ser Cys Pro Ile Pro Gly Gly Arg
            20              25              30

Asp Gln Leu Pro Asp Cys Tyr Ser Thr Thr Pro Gly Gly Thr Leu Tyr
            35              40              45

Ala Thr Thr Pro Gly Gly Thr Arg Ile Ile Tyr Asp Arg Lys Phe Leu
    50              55              60

Leu Glu Cys Lys Asn Ser Pro Ile Ala Arg Thr Pro Pro Cys Cys Leu
65              70              75              80
```

```
Pro Gln Ile Pro Gly Val Thr Thr Pro Pro Thr Ala Pro Leu Ser Lys
              85                90                95

Leu Glu Glu Leu Lys Glu Gln Glu Thr Glu Glu Glu Ile Pro Asp Asp
              100               105               110

Ala Gln Phe Glu Met Asp Ile
              115
```

```
<210> 1268
<211> 329
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (307)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (308)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (314)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (317)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (323)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (327)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (328)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (329)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1268
Arg Cys Xaa Gly Ser Ala Arg Ile Glu Val Cys Ser Ala Phe Gly Ser
 1               5                   10                  15

Met Ser Ala Ala Val Thr Ala Gly Lys Leu Ala Arg Ala Pro Ala Asp
            20                  25                  30

Pro Gly Lys Ala Gly Val Pro Gly Val Ala Ala Pro Gly Ala Pro Ala
            35                  40                  45

Ala Ala Pro Pro Ala Lys Glu Ile Pro Glu Xaa Leu Val Asp Pro Arg
        50                  55                  60

Ser Arg Arg Arg Tyr Val Arg Gly Arg Phe Leu Gly Lys Gly Gly Phe
65                  70                  75                  80

Ala Lys Cys Phe Glu Ile Ser Asp Ala Asp Thr Lys Glu Val Phe Ala
                85                  90                  95

Gly Lys Ile Val Pro Lys Ser Leu Leu Leu Lys Pro His Gln Arg Glu
                100                 105                 110

Lys Met Ser Met Glu Ile Ser Ile His Arg Ser Leu Ala His Gln His
            115                 120                 125

Val Val Gly Phe His Gly Phe Phe Glu Asp Asn Asp Phe Val Phe Val
            130                 135                 140

Val Leu Glu Leu Cys Arg Arg Arg Ser Leu Leu Glu Leu His Lys Arg
145                 150                 155                 160

Arg Lys Ala Leu Thr Glu Pro Glu Ala Arg Tyr Tyr Leu Arg Gln Ile
                165                 170                 175

Val Leu Gly Cys Gln Tyr Leu His Arg Asn Arg Val Ile His Arg Asp
```

```
                 180                      185                        190

    Leu Lys Leu Gly Asn Leu Phe Leu Asn Glu Asp Leu Glu Val Lys Ile
            195                      200                    205

    Gly Asp Phe Gly Leu Ala Thr Lys Val Glu Tyr Asp Gly Glu Arg Lys
            210                      215                    220

    Lys Thr Leu Cys Gly Thr Pro Asn Tyr Ile Ala Pro Glu Val Leu Ser
    225                      230                    235                    240

    Lys Lys Gly His Ser Phe Glu Val Asp Val Trp Ser Ile Gly Cys Ile
                     245                    250                    255

    Met Tyr Thr Leu Leu Val Gly Lys Pro Pro Phe Glu Thr Ser Cys Leu
                     260                    265                    270

    Lys Glu Thr Tyr Leu Arg Ile Lys Lys Asn Glu Tyr Ser Ile Pro Lys
                     275                    280                    285

    His Ile Asn Pro Val Ala Ala Ser Leu Ile Gln Lys Met Leu Gln Thr
            290                      295                    300

    Asp Pro Xaa Xaa Arg Gln Pro Leu Thr Xaa Cys Leu Xaa Thr Ser Asp
    305                      310                    315                    320

    Leu Ser Xaa Gln Lys Lys Xaa Xaa Xaa
                     325
```

```
<210> 1269
<211> 144
<212> PRT
<213> Homo sapiens

<400> 1269
    Leu Gln Thr Asn Ser Phe Pro Val Leu Leu Thr Gln Gly Leu Glu Ser
     1               5                     10                     15

    Asn Asp Phe Glu Met Leu Asn Lys Val Leu Gln Thr Arg Asn Val Asn
                     20                    25                    30

    Leu Ile Lys Lys Thr Val Leu Arg Met Pro Leu His Thr Ile Ile Pro
                35                    40                    45

    Leu Leu Gln Glu Leu Thr Lys Arg Leu Gln Gly His Pro Asn Ser Ala
            50                    55                    60

    Val Leu Met Val Gln Trp Leu Lys Cys Val Leu Thr Val His Ala Ser
     65                    70                    75                    80
```

```
Tyr Leu Ser Thr Leu Pro Asp Leu Val Pro Gln Leu Gly Thr Leu Tyr
            85              90              95

Gln Leu Met Glu Ser Arg Val Lys Thr Phe Gln Lys Leu Ser His Leu
            100             105             110

His Gly Lys Leu Ile Leu Leu Ile Thr Gln Val Thr Ala Ser Glu Lys
            115             120             125

Thr Lys Gly Ala Thr Ser Pro Gly Gln Lys Ala Lys Leu Val Tyr Glu
    130             135             140
```

<210> 1270
<211> 84
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1270
```
Asn Ser Ala Arg Ala Thr Leu Asp Glu Ala Thr Pro Thr Leu Thr Asn
  1           5               10              15

Gln Ser Pro Thr Leu Thr Leu Gln Ser Thr Asn Thr His Thr Gln Ser
            20              25              30

Ser Ser Ser Ser Ser Xaa Gly Gly Leu Phe Arg Ser Arg Pro Ala His
            35              40              45

Ser Leu Pro Pro Gly Glu Asp Gly Arg Val Glu Pro Tyr Val Asp Phe
    50              55              60

Ala Glu Phe Tyr Arg Leu Trp Ser Val Asp His Gly Glu Gln Ser Val
    65              70              75              80

Val Thr Ala Pro
```

<210> 1271
<211> 123

```
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1271
Leu Gln Ala Ala Gly Gly His Leu Thr Ala Ala Pro Gly Ala Val His
 1               5                  10                  15

Gly Ala Ala Ala Val Arg Phe Gln Ala Ala Ala Xaa Xaa Gln Glu Gly
                20                  25                  30

Val Glu Ala Ala Pro Arg Pro Val Ser Pro Gln Ala Ser Leu Glu Glu
                35                  40                  45

Arg Ala Val Ser Arg Asn Pro Leu Cys Xaa Leu Cys Leu Glu Glu Arg
        50                  55                  60

Arg His Pro Thr Ala Thr Pro Cys Gly Xaa Leu Phe Cys Trp Glu Cys
65                  70                  75                  80

Ile Xaa Ala Trp Cys Ser Ser Lys Ala Glu Cys Pro Leu Leu Pro Gly
                85                  90                  95

Glu Ser Ser Leu Pro Arg Lys Leu Ile Tyr Leu Arg His Tyr Arg Leu
                100                 105                 110

Asn Arg Arg Pro Gly Trp Ala Leu Asp Thr Asn
```

115   120

<210> 1272
<211> 86
<212> PRT
<213> Homo sapiens

<400> 1272
Gly Thr Glu Lys Arg Glu Lys Arg Leu Gly Ser His His Gly Glu Ala
1   5   10   15

Gly Val Ser Gln Leu Thr Ser Ala Gly Asp Ser Gly Val Leu Val Leu
           20   25   30

Pro Leu Ser Leu Pro Pro Arg Ser Ser Leu Ala Gly Leu Ala Glu Ala
           35   40   45

Leu Leu Met Asn Leu Thr Glu Gly Pro Leu Ala Met Ala Glu Met Asp
       50   55   60

Pro Thr Gln Gly Arg Val Val Phe Glu Asp Val Ala Ile Tyr Phe Ser
65   70   75   80

Arg Arg Ser Gly Gly Thr
           85

<210> 1273
<211> 72
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (60)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1273

Ile Glu Pro Leu Leu Arg Leu Leu Arg Ile Asn His Leu Leu Asn Arg
1   5   10   15

Ser Ala Tyr Gln Glu Gly Arg Glu Gly Ser Gln Lys Glu Met Leu Ala
            20   25   30

Pro Gly Pro Arg Ser Gln Gly Leu Leu Thr Pro Gly Val Asp Phe Phe
        35   40   45

Ser Glu Val Ala Pro Tyr Lys Gly Asn Met Ala Xaa Ala Gly Thr Ser
    50   55   60

Thr Gly Arg Leu Xaa Ser Gly Xaa
65   70

<210> 1274
<211> 56
<212> PRT
<213> Homo sapiens

<400> 1274
His Leu Thr Tyr Ser Trp His Leu Val Gly Thr Glu Ser Met Asn Arg
1   5   10   15

Ser Tyr Trp Leu Pro Ile Gln Arg Leu Val Gly Val Val Ile Pro Ile
            20   25   30

Ala Glu Ser Gln Leu Val Asn Gln Gln Gly Phe His Leu Cys Cys Ser
            35   40   45

Pro Pro Pro Ser Pro Leu Glu Gly
        50   55

<210> 1275
<211> 161
<212> PRT
<213> Homo sapiens

<400> 1275
Leu Pro Gly Cys Arg Asn Ser Ala Gln Asn Cys Arg Leu Ile Phe Ser
1   5   10   15

Lys Ala Lys Pro Ser Val Leu Ala Leu Cys Leu Leu Asn Leu Glu Val
            20   25   30

Glu Thr Leu Lys Ser Val Glu Leu Leu Glu Ile Leu Leu Leu Val Lys
            35   40   45

```
Lys His Ser Lys Ile Asn Asp Thr Glu Phe Phe Tyr Trp Arg Glu Leu
    50              55              60

Val Ser Lys Cys Leu Ala Glu Tyr Ser Ser Pro Glu Cys Cys Lys Pro
65              70              75              80

Asp Leu Lys Lys Leu Val Trp Ile Val Ser Arg Arg Thr Ala Gln Asn
            85              90              95

Leu His Asn Ser Tyr Tyr Ser Val Pro Glu Leu Pro Thr Ile Pro Glu
        100             105             110

Gly Gly Cys Phe Asp Glu Ser Glu Ser Glu Asp Ser Cys Glu Asp Met
        115             120             125

Ser Cys Gly Glu Glu Ser Leu Ser Ser Ser Pro Pro Ser Asp Gln Glu
    130             135             140

Cys Thr Phe Phe Phe Asn Phe Lys Val Ala Gln Thr Leu Cys Phe Pro
145             150             155             160

Ser
```

```
<210> 1276
<211> 49
<212> PRT
<213> Homo sapiens

<400> 1276
Asn Asn Lys Ser Leu Leu Lys Lys Tyr Ile Phe Phe Leu Leu Arg Ala
1               5               10              15

Leu Leu Ala Ile Gly Asn Leu Lys Ile Ser Ser Pro Lys Gln Gly Pro
            20              25              30

Tyr Gln Ile Phe Leu Asp Pro Pro Met Leu Ser Val Leu Ala Thr His
        35              40              45

Cys
```

```
<210> 1277
<211> 89
<212> PRT
<213> Homo sapiens
```

<400> 1277
Leu Asn Leu Leu Met Ser Thr Ile Leu Phe Leu Gln Asp Leu Pro Gly
1   5   10   15

Leu Lys Arg Asn Tyr Phe Pro Gly Pro Asn Thr Leu Val Phe Tyr Gln
            20   25   30

His Leu Ile Asp Leu Gly Lys Ala Glu Cys Leu Thr Pro Ala Cys Gly
        35   40   45

Ile Leu Leu Trp Gln Ala Glu Gln Thr Asn Thr Asp Phe Asn Ile Gln
        50   55   60

Thr Lys Ser Lys Gly Met Glu Lys Asp Thr Pro Ser Gln Asn Lys Glu
65   70   75   80

Ser Ser Tyr Val Asn Leu Arg Gln Ser
                85

<210> 1278
<211> 199
<212> PRT
<213> Homo sapiens

<400> 1278
Pro Gln Pro Leu Pro Pro Pro Thr Ser Met Ala Arg His Val Phe Leu
1   5   10   15

Thr Gly Pro Pro Gly Val Gly Lys Thr Thr Leu Ile His Lys Ala Ser
            20   25   30

Glu Val Leu Lys Ser Ser Gly Val Pro Val Asp Gly Phe Tyr Thr Glu
            35   40   45

Glu Val Arg Gln Gly Gly Arg Arg Ile Gly Phe Asp Val Val Thr Leu
        50   55   60

Ser Gly Thr Arg Gly Pro Leu Ser Arg Val Gly Leu Glu Pro Pro Pro
65   70   75   80

Gly Lys Arg Glu Cys Arg Val Gly Gln Tyr Val Val Asp Leu Thr Ser
                85   90   95

Phe Glu Gln Leu Ala Leu Pro Val Leu Arg Asn Ala Asp Cys Ser Ser
            100   105   110

Gly Pro Gly Gln Arg Val Cys Val Ile Asp Glu Ile Gly Lys Met Glu
            115   120   125

```
Leu Phe Ser Gln Leu Phe Ile Gln Ala Val Arg Gln Thr Leu Ser Thr
    130             135             140

Pro Gly Thr Ile Ile Leu Gly Thr Ile Pro Val Pro Lys Gly Lys Pro
145             150             155             160

Leu Ala Leu Val Glu Glu Ile Arg Asn Arg Lys Asp Val Lys Val Phe
                165             170             175

Asn Val Thr Lys Glu Asn Arg Asn His Leu Leu Pro Asp Ile Val Thr
            180             185             190

Cys Val Gln Ser Ser Arg Lys
        195


<210> 1279
<211> 183
<212> PRT
<213> Homo sapiens

<400> 1279
Phe Gly Thr Glu Gly Ala Met Ala Val Ala Asn Ser Ser Pro Val Asn
  1             5             10             15

Pro Val Val Phe Phe Asp Val Ser Ile Gly Gly Gln Glu Val Gly Arg
                20             25             30

Met Lys Ile Glu Leu Phe Ala Asp Val Val Pro Lys Thr Ala Glu Asn
            35             40             45

Phe Arg Gln Phe Cys Thr Gly Glu Phe Arg Lys Asp Gly Val Pro Ile
    50             55             60

Gly Tyr Lys Gly Ser Thr Phe His Arg Val Ile Lys Asp Phe Met Ile
65             70             75             80

Gln Gly Gly Asp Phe Val Asn Gly Asp Gly Thr Gly Val Ala Ser Ile
                85             90             95

Tyr Arg Gly Pro Phe Ala Asp Glu Asn Phe Lys Leu Arg His Ser Ala
            100             105             110

Pro Gly Leu Leu Ser Met Ala Asn Ser Gly Pro Ser Thr Asn Gly Cys
            115             120             125

Gln Phe Phe Ile Thr Cys Ser Lys Cys Asp Trp Leu Asp Gly Lys His
    130             135             140
```

```
Val Val Phe Gly Lys Ile Ile Asp Gly Leu Leu Val Met Arg Lys Ile
145             150             155             160

Glu Asn Val Pro Thr Gly Pro Asn Asn Lys Pro Lys Leu Pro Val Val
                165             170             175

Ile Ser Gln Cys Gly Glu Met
                180
```

<210> 1280
<211> 62
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1280
```
Asn Phe Cys Trp Asn Ile Ile Asn Gly Ser Ile Pro Lys Asp Thr Trp
  1           5               10              15

Xaa Leu Leu Leu Asp Phe Ser Thr Met Ile Ala Asp Asp Met Ser Asn
            20              25              30

Tyr Asp Glu Glu Gly Ala Trp Pro Val Leu Ile Asp Asp Phe Val Glu
            35              40              45

Phe Ala Arg Pro Gln Ile Ala Gly Thr Lys Ser Thr Thr Val
        50              55              60
```

<210> 1281
<211> 38
<212> PRT
<213> Homo sapiens

<400> 1281
```
Cys Ser Phe Ile Ile Leu Ile Ile Leu Gly Pro Leu Glu Phe Ala Glu
  1           5               10              15

Ser Thr Leu Pro Val Leu Tyr Lys Trp Asn Asn Lys Ala Trp Met Thr
            20              25              30

Ala Cys Leu Phe Thr Ser
            35
```

```
<210> 1282
<211> 515
<212> PRT
<213> Homo sapiens

<400> 1282
Ser Ser Phe Phe Ser Phe Leu Ala Ala Ala Pro Gly Ser Ser Arg Arg
 1               5                   10                  15

Ala Ala Pro Val Leu Arg Pro Glu Met Asn Pro Ala Ala Glu Ala Glu
                20                  25                  30

Phe Asn Ile Leu Leu Ala Thr Asp Ser Tyr Lys Val Thr His Tyr Lys
            35                  40                  45

Gln Tyr Pro Pro Asn Thr Ser Lys Val Tyr Ser Tyr Phe Glu Cys Arg
        50                  55                  60

Glu Lys Lys Thr Glu Asn Ser Lys Leu Arg Lys Val Lys Tyr Glu Glu
65                  70                  75                  80

Thr Val Phe Tyr Gly Leu Gln Tyr Ile Leu Asn Lys Tyr Leu Lys Gly
                85                  90                  95

Lys Val Val Thr Lys Glu Lys Ile Gln Glu Ala Lys Asp Val Tyr Lys
                100                 105                 110

Glu His Phe Gln Asp Asp Val Phe Asn Glu Lys Gly Trp Asn Tyr Ile
            115                 120                 125

Leu Glu Lys Tyr Asp Gly His Leu Pro Ile Glu Ile Lys Ala Val Pro
    130                 135                 140

Glu Gly Phe Val Ile Pro Arg Gly Asn Val Leu Phe Thr Val Glu Asn
145                 150                 155                 160

Thr Asp Pro Glu Cys Tyr Trp Leu Thr Asn Trp Ile Glu Thr Ile Leu
                165                 170                 175

Val Gln Ser Trp Tyr Pro Ile Thr Val Ala Thr Asn Ser Arg Glu Gln
                180                 185                 190

Lys Lys Ile Leu Ala Lys Tyr Leu Leu Glu Thr Ser Gly Asn Leu Asp
            195                 200                 205

Gly Leu Glu Tyr Lys Leu His Asp Phe Gly Tyr Arg Gly Val Ser Ser
    210                 215                 220

Gln Glu Thr Ala Gly Ile Gly Ala Ser Ala His Leu Val Asn Phe Lys
```

```
        225                     230                     235                     240

     Gly Thr Asp Thr Val Ala Gly Leu Ala Leu Ile Lys Lys Tyr Tyr Gly
                     245                 250                 255

     Thr Lys Asp Pro Val Pro Gly Tyr Ser Val Pro Ala Ala Glu His Ser
                 260                 265                 270

     Thr Ile Thr Ala Trp Gly Lys Asp His Glu Lys Asp Ala Phe Glu His
             275                 280                 285

     Ile Val Thr Gln Phe Ser Ser Val Pro Val Ser Val Val Ser Asp Ser
         290                 295                 300

     Tyr Asp Ile Tyr Asn Ala Cys Glu Lys Ile Trp Gly Glu Asp Leu Arg
     305                 310                 315                 320

     His Leu Ile Val Ser Arg Ser Thr Gln Ala Pro Leu Ile Ile Arg Pro
                     325                 330                 335

     Asp Ser Gly Asn Pro Leu Asp Thr Val Leu Lys Val Leu Glu Ile Leu
                 340                 345                 350

     Gly Lys Lys Phe Pro Val Thr Glu Asn Ser Lys Gly Tyr Lys Leu Leu
                 355                 360                 365

     Pro Pro Tyr Leu Arg Val Ile Gln Gly Asp Gly Val Asp Ile Asn Thr
         370                 375                 380

     Leu Gln Glu Ile Val Glu Gly Met Lys Gln Lys Met Trp Ser Ile Glu
     385                 390                 395                 400

     Asn Ile Ala Phe Gly Ser Gly Gly Gly Leu Leu Gln Lys Leu Thr Arg
                     405                 410                 415

     Asp Leu Leu Asn Cys Ser Phe Lys Cys Ser Tyr Val Val Thr Asn Gly
                 420                 425                 430

     Leu Gly Ile Asn Val Phe Lys Asp Pro Val Ala Asp Pro Asn Lys Arg
             435                 440                 445

     Ser Lys Lys Gly Arg Leu Ser Leu His Arg Thr Pro Ala Gly Asn Phe
         450                 455                 460

     Val Thr Leu Glu Glu Gly Lys Gly Asp Leu Glu Glu Tyr Gly Gln Asp
     465                 470                 475                 480

     Leu Leu His Thr Val Phe Lys Asn Gly Lys Val Thr Lys Ser Tyr Ser
                     485                 490                 495

     Phe Asp Glu Ile Arg Lys Asn Ala Gln Leu Asn Ile Glu Leu Glu Ala
```

```
                    500                     505                     510
          Ala His His
                    515



          <210> 1283
          <211> 88
          <212> PRT
          <213> Homo sapiens

          <400> 1283
          Arg Arg Leu His Leu Phe Leu Leu Ser Leu Leu Gly Met Leu Thr Ala
           1               5                   10                  15

          Ser Gly Asn Ser Glu Leu Asn Ile Cys Phe Val Arg Lys Tyr Leu Phe
                        20                  25                  30

          Phe Tyr Phe Glu Val Trp Gln Pro Ser Cys Tyr Pro Lys Ala Lys Pro
                      35                  40                  45

          Leu Cys Gln Glu Ser Asn Lys Cys Leu Glu Ser Lys His Asp Val Ser
                  50                  55                  60

          Ile Val Gln Pro Pro Phe Ser Trp Leu Phe Lys Gly Cys Thr Ser Cys
           65                  70                  75                  80

          Ile Lys Gly Tyr Phe Met Leu Lys
                          85



          <210> 1284
          <211> 17
          <212> PRT
          <213> Homo sapiens

          <400> 1284
          Phe Cys Ile Phe Ser Arg Asp Gly Val Ser Pro Cys Trp Ser Asp Trp
           1               5                   10                  15

          Ser



          <210> 1285
          <211> 515
          <212> PRT
          <213> Homo sapiens
```

```
<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (126)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (135)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1285
Gly Cys Ser Leu His Leu Trp Ala Ser Leu Ala Arg His Ala Gly Gln
 1               5                  10                  15

Cys Leu Pro Ala Pro Phe Ala Thr Ser Ser Ala Leu Arg Gly Leu Glu
            20              25                  30

Leu Gly Glu Arg Ala Gly Gly Leu Val Gly Trp Pro Gly Leu Arg Pro
            35                  40                  45

Ala Ala Thr Thr Ile Leu Trp Pro Gly Arg Cys Glu Trp Ser Ala Gly
    50                  55                  60

Gln Ser Ala Arg Cys Leu Ala Pro Gln Xaa Ile Pro Pro Ser Thr Pro
65                  70                  75                  80

Gly Ser Ser Asp Val Gly Gln Leu Cys Ala Gly Ala Cys Asp Pro Arg
                85                  90                  95

Xaa Gly Leu Gly Ala Ala Ser Ile Ala Ala Asp Gly Ala Pro Arg Gly
            100                 105                 110

Pro Gly Glu Tyr Gln Pro Gly Lys Gly Ser Ala Arg Pro Xaa Thr Ala
            115                 120                 125

Asp Pro Gly Arg Ala Gly Xaa Thr Glu Val Arg Glu Pro Ala Gly Ser
    130                 135                 140

Ser Ala Gln Gln Arg Pro Lys Thr Arg Arg Val Ala Pro Leu Lys Asp
145                 150                 155                 160
```

Leu Pro Val Asn Asp Glu His Val Thr Val Pro Pro Trp Lys Ala Asn
                165   170   175

Ser Lys Gln Pro Ala Phe Thr Ile His Val Asp Glu Ala Glu Lys Glu
            180   185   190

Ala Gln Lys Lys Pro Ala Glu Ser Gln Lys Ile Glu Arg Glu Asp Ala
            195   200   205

Leu Ala Phe Asn Ser Ala Ile Ser Leu Pro Gly Pro Arg Lys Pro Leu
    210   215   220

Val Pro Leu Asp Tyr Pro Met Asp Gly Ser Phe Glu Ser Pro His Thr
225   230   235   240

Met Asp Met Ser Ile Val Leu Glu Asp Glu Lys Pro Val Ser Val Asn
            245   250   255

Glu Val Pro Asp Tyr His Glu Asp Ile His Thr Tyr Leu Arg Glu Met
            260   265   270

Glu Val Lys Cys Lys Pro Lys Val Gly Tyr Met Lys Lys Gln Pro Asp
            275   280   285

Ile Thr Asn Ser Met Arg Ala Ile Leu Val Asp Trp Leu Val Glu Val
    290   295   300

Gly Glu Glu Tyr Lys Leu Gln Asn Glu Thr Leu His Leu Ala Val Asn
305   310   315   320

Tyr Ile Asp Arg Phe Leu Ser Ser Met Ser Val Leu Arg Gly Lys Leu
            325   330   335

Gln Leu Val Gly Thr Ala Ala Met Leu Leu Ala Ser Lys Phe Glu Glu
            340   345   350

Ile Tyr Pro Pro Glu Val Ala Glu Phe Val Tyr Ile Thr Asp Asp Thr
            355   360   365

Tyr Thr Lys Lys Gln Val Leu Arg Met Glu His Leu Val Leu Lys Val
    370   375   380

Leu Thr Phe Asp Leu Ala Ala Pro Thr Val Asn Gln Phe Leu Thr Gln
385   390   395   400

Tyr Phe Leu His Gln Gln Pro Ala Asn Cys Lys Val Glu Ser Leu Ala
            405   410   415

Met Phe Leu Gly Glu Leu Ser Leu Ile Asp Ala Asp Pro Tyr Leu Lys
            420   425   430

```
Tyr Leu Pro Ser Val Ile Ala Gly Ala Ala Phe His Leu Ala Leu Tyr
        435             440             445

Thr Val Thr Gly Gln Ser Trp Pro Glu Ser Leu Ile Arg Lys Thr Gly
        450             455             460

Tyr Thr Leu Glu Ser Leu Lys Pro Cys Leu Met Asp Leu His Gln Thr
465             470             475             480

Tyr Leu Lys Ala Pro Gln His Ala Gln Gln Ser Ile Arg Glu Lys Tyr
            485             490             495

Lys Asn Ser Lys Tyr His Gly Val Ser Leu Leu Asn Pro Pro Glu Thr
            500             505             510

Leu Asn Leu
        515
```

```
<210> 1286
<211> 108
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (96)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (102)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (107)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1286
Arg Pro Ala Cys Pro Ser Gln Glu Arg Pro Pro Pro Ser Gln Gln Met
    1           5               10              15

Arg Gln Gly Cys Leu Ala Leu Pro Lys Ser Glu Ser Leu Pro Ser Gly
```

```
                 20                    25                    30
    Ile Cys Arg Ser Ala Gln Gly Ser Arg Arg Ser Arg Gly Ala Gly Ala
            35                    40                    45

    Ala Gly Pro Gln Pro Pro Leu Glu Arg Ala Asp Val Leu Asn Val Ser
        50                    55                    60

    Pro Gly Arg Cys Leu Pro His Gln Trp Lys Leu Ser Ser Cys Cys Lys
    65                    70                    75                    80

    Thr Trp Leu Phe Xaa Glu Ser Phe Glu Ile His Arg Ser Thr Tyr Xaa
                    85                    90                    95

    Val His Gln Arg Thr Xaa Gly Ala Gly Val Xaa Pro
                100                   105
```

```
<210> 1287
<211> 214
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (164)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (193)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (203)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (207)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (210)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
```

<222> (211)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1287

Gln Val Arg Phe Pro Ala Glu Glu Ala Ser Ser Pro Ala Pro Trp His
 1   5   10   15

Pro Lys Ala Ala Ala Arg Ala Leu Pro Gln Ala Leu Ala Asn Gly Ala
        20   25   30

Gln Leu Leu Leu Leu Gly Ser Ala Gly Pro Thr Met Glu Asn Gln Val
        35   40   45

Gln Thr Leu Thr Ser Tyr Leu Trp Ser Arg His Leu Pro Val Glu Pro
    50   55   60

Glu Glu Leu Gln Arg Arg Ala Arg His Leu Glu Lys Lys Phe Leu Glu
 65   70   75   80

Asn Pro Asp Leu Ser Gln Thr Glu Glu Lys Leu Arg Gly Ala Val Leu
            85   90   95

His Ala Leu Arg Lys Thr Thr Tyr His Trp Gln Glu Leu Ser Tyr Thr
            100   105   110

Glu Gly Leu Ser Leu Val Tyr Met Ala Ala Arg Leu Asp Gly Gly Phe
            115   120   125

Ala Ala Val Ser Arg Ala Phe His Glu Ile Arg Ala Arg Asn Pro Ala
            130   135   140

Phe Gln Pro Gln Thr Leu Met Asp Phe Gly Ser Gly Thr Gly Leu Ser
145   150   155   160

Pro Gly Leu Xaa Thr Val Phe Gly Ala Arg Ala Tyr Val Asn Ile Trp
            165   170   175

Cys Gly Gln Ile Thr Cys Met Trp Phe Ala Glu Asn Ser Glu Arg Gly
            180   185   190

Xaa Ile Gly Ser Leu Tyr Ser Gly Leu Phe Xaa Ser Ser Thr Xaa Asn
            195   200   205

Gln Xaa Xaa Leu Met Ile
    210

<210> 1288
<211> 68
<212> PRT

```
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1288
Xaa Ser Leu Asn Cys Gly Ser Ile Ser Thr Xaa Thr Asn Gln Gly Ser
 1               5                  10                  15

Pro Leu Ser Val Gly Tyr His Phe Pro Leu Leu Pro Pro Val Ile Phe
            20                  25                  30

Thr Phe Ser Thr Thr Gly Glu Leu Met Gly Ser Glu Gly Gln Met Tyr
            35                  40                  45

Phe Leu Phe Gly His Arg Gly Phe Pro Val Leu Cys Val Phe Leu Met
        50                  55                  60

Lys Glu Ser Leu
 65


<210> 1289
<211> 318
<212> PRT
<213> Homo sapiens

<400> 1289
Arg Leu Gln Val Val Gln Gln Trp Ile Gln Arg Ile Arg Gln Arg Pro
 1               5                  10                  15

Gly Cys Leu Trp Leu Leu Ala Val Ala Leu Leu Pro Trp Thr Cys Ala
            20                  25                  30

Ser Arg Ala Leu Gln His Leu Asp Pro Pro Ala Pro Leu Pro Leu Val
            35                  40                  45

Ile Trp His Gly Met Gly Asp Ser Cys Cys Asn Pro Leu Ser Met Gly
        50                  55                  60

Ala Ile Lys Lys Met Val Glu Lys Lys Ile Pro Gly Ile Tyr Val Leu
 65                  70                  75                  80
```

```
Ser Leu Glu Ile Gly Lys Thr Leu Met Glu Asp Val Glu Asn Ser Phe
                 85                  90                  95

Phe Leu Asn Val Asn Ser Gln Val Thr Thr Val Cys Gln Ala Leu Ala
             100             105             110

Lys Asp Pro Lys Leu Gln Gln Gly Tyr Asn Ala Met Gly Phe Ser Gln
         115             120             125

Gly Gly Gln Phe Leu Arg Ala Val Ala Gln Arg Cys Pro Ser Pro Pro
     130             135             140

Met Ile Asn Leu Ile Ser Val Gly Gly Gln His Gln Gly Val Phe Gly
145             150             155             160

Leu Pro Arg Cys Pro Gly Glu Ser Ser His Ile Cys Asp Phe Ile Arg
             165             170             175

Lys Thr Leu Asn Ala Gly Ala Tyr Ser Lys Val Val Gln Glu Arg Leu
             180             185             190

Val Gln Ala Glu Tyr Trp His Asp Pro Ile Lys Glu Asp Val Tyr Arg
         195             200             205

Asn His Ser Ile Phe Leu Ala Asp Ile Asn Gln Glu Arg Gly Ile Asn
     210             215             220

Glu Ser Tyr Lys Lys Asn Leu Met Ala Leu Lys Lys Phe Val Met Val
225             230             235             240

Lys Phe Leu Asn Asp Ser Ile Val Asp Pro Val Asp Ser Glu Trp Phe
             245             250             255

Gly Phe Tyr Arg Ser Gly Gln Ala Lys Glu Thr Ile Pro Leu Gln Glu
             260             265             270

Thr Ser Leu Tyr Thr Gln Asp Arg Leu Gly Leu Lys Glu Met Asp Asn
         275             280             285

Ala Gly Gln Leu Val Phe Leu Ala Thr Glu Gly Asp His Leu Gln Leu
     290             295             300

Ser Glu Glu Trp Phe Tyr Ala His Ile Ile Pro Phe Leu Gly
305             310             315
```

```
<210> 1290
<211> 119
<212> PRT
<213> Homo sapiens
```

<400> 1290
```
Lys His Met Gly Ser Cys Arg Leu Leu Leu Cys Phe Phe Pro Leu Ser
 1               5                   10                  15

Arg Trp Pro Gly Arg Asp Thr Thr Phe Cys Asn Gln Gly Thr Glu Asn
             20                  25                  30

Arg Arg Ala Cys Ser Gln Gln Ala Asn Ser Leu Arg Tyr Lys Ile Thr
         35                  40                  45

Tyr Arg Ser Cys Leu Arg Met Val Thr Asp Arg Pro Asp Cys Leu Gly
     50                  55                  60

His Arg Asn Thr Ser Cys Phe Pro Leu Lys Lys Val Leu Pro Glu Ala
 65                  70                  75                  80

Phe Cys Leu Ser Ala Pro Cys Trp Ser Glu Val Gln Ala Asp Glu Asn
                 85                  90                  95

Pro Asp Ile Ala Cys Gly Gly Leu Gln Leu Arg Lys Val Gly Arg Glu
                100                 105                 110

Ile Ile Leu Val Leu Val Gln
             115
```

<210> 1291
<211> 47
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1291
```
Ile Ser Asp Pro Tyr Ser Gln Gly Tyr Asn Tyr Ser Lys Lys Tyr Ile
 1               5                   10                  15
```

```
Gln Gly Lys Leu Xaa Leu Ile Ser Ser Leu Thr Tyr Arg Gly Asn Lys
                20              25                30

Thr Xaa Val Leu Gln Ile Gly Leu Gln Xaa His His Cys Ser Gly
        35                  40                  45
```

<210> 1292
<211> 275
<212> PRT
<213> Homo sapiens

<400> 1292

```
Gly Gly Ala Ser Asn Phe Leu Ser Trp Arg Glu Ser Ala Arg Trp Ser
 1               5                   10                  15

Arg Gln Leu Arg Arg Thr Leu Ile Arg Leu Ser Phe Pro Ile Ser Cys
                20              25                  30

Gly Arg Ser His Ala Phe Gly Gly Cys Lys Met Ala Ala Thr Ser Gly
            35              40                  45

Thr Asp Glu Pro Val Ser Gly Glu Leu Val Ser Val Ala His Ala Leu
        50              55                  60

Ser Leu Pro Ala Glu Ser Tyr Gly Asn Asp Pro Asp Ile Glu Met Ala
 65                 70                  75                  80

Trp Ala Met Arg Ala Met Gln His Ala Glu Val Tyr Tyr Lys Leu Ile
                85              90                  95

Ser Ser Val Asp Pro Gln Phe Leu Lys Leu Thr Lys Val Asp Asp Gln
            100             105                 110

Ile Tyr Ser Glu Phe Arg Lys Asn Phe Glu Thr Leu Arg Ile Asp Val
            115             120                 125

Leu Asp Pro Glu Glu Leu Lys Ser Glu Ser Ala Lys Glu Lys Trp Arg
        130             135                 140

Pro Phe Cys Leu Lys Phe Asn Gly Ile Val Glu Asp Phe Asn Tyr Gly
145             150                 155                 160

Thr Leu Leu Arg Leu Asp Cys Ser Gln Gly Tyr Thr Glu Glu Asn Thr
                165                 170                 175

Ile Phe Ala Pro Arg Ile Gln Phe Phe Ala Ile Glu Ile Ala Arg Asn
                180                 185                 190
```

```
Arg Glu Gly Tyr Asn Lys Ala Val Tyr Ile Ser Val Gln Asp Lys Glu
        195             200             205

Gly Glu Lys Gly Val Asn Asn Gly Gly Glu Lys Arg Ala Asp Ser Gly
        210             215             220

Glu Glu Glu Asn Thr Lys Asn Gly Gly Glu Lys Gly Ala Asp Ser Gly
225             230             235             240

Glu Glu Lys Glu Glu Gly Ile Asn Arg Glu Asp Lys Thr Asp Lys Gly
            245             250             255

Gly Glu Lys Gly Lys Glu Ala Asp Lys Glu Ile Asn Lys Ser Gly Glu
            260             265             270

Lys Ala Met
        275
```

```
<210> 1293
<211> 263
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (86)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1293
Gln Ile His Gly Gln Val Val Gly Thr Val Thr Cys Lys Cys Asp Leu
  1             5             10             15

Glu Gly Ile Met Pro Asn Val Thr Ile Ser Leu Ser Leu Pro Thr Xaa
                20             25             30

Gly Ser Pro Leu Gln Asp Ile Leu Val His Pro Cys Val Thr Ser Leu
            35             40             45

Asp Ser Ala Ile Leu Thr Ser Ser Ser Ile Asp Ala Met Asp Asp Ser
        50             55             60

Ala Phe Ser Gly Pro Tyr Lys Phe Pro Phe Thr Pro Pro Leu Glu Ser
   65             70             75             80
```

```
Phe Asn Leu Cys Phe Xaa Thr Ser Gln Val Pro Val Pro Pro Ile Leu
                85                  90              95

Gly Phe Tyr Gln Met Lys Glu Glu Glu Val Gln Leu Arg Ile Thr Ile
            100              105              110

Asn Leu Lys Leu His Glu Ser Val Lys Asn Asn Phe Glu Phe Cys Glu
            115              120              125

Ala His Ile Pro Phe Tyr Asn Arg Gly Pro Ile Thr His Leu Glu Tyr
        130              135              140

Lys Thr Ser Phe Gly Gln Leu Glu Val Phe Arg Glu Lys Ser Leu Leu
145              150              155              160

Ile Trp Ile Ile Gly Gln Lys Phe Pro Lys Ser Met Glu Ile Ser Leu
                165              170              175

Ser Gly Thr Val Thr Phe Gly Ala Lys Ser His Glu Lys Gln Pro Phe
            180              185              190

Asp Pro Ile Cys Thr Gly Glu Thr Ala Tyr Leu Lys Leu His Phe Arg
        195              200              205

Ile Leu Asp Tyr Thr Leu Thr Gly Cys Tyr Ala Asp Gln His Ser Val
    210              215              220

Gln Val Phe Ala Ser Gly Lys Pro Lys Ile Ser Ala His Arg Lys Leu
225              230              235              240

Ile Ser Ser Asp Tyr Tyr Ile Trp Asn Ser Lys Ala Pro Ala Pro Val
                245              250              255

Thr Tyr Gly Ser Leu Leu Leu
                260
```

```
<210> 1294
<211> 120
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (89)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1294
Pro Thr Arg Pro Pro Thr Arg Pro Pro Thr Arg Pro Arg Ser Cys Leu
    1               5               10              15
```

```
Val Met Ser Gly Arg Gly Lys Gly Gly Lys Gly Leu Gly Lys Gly Gly
            20          25              30

Ala Lys Arg His Arg Lys Val Leu Arg Asp Asn Ile Gln Gly Ile Thr
        35              40              45

Lys Pro Ala Ile Arg Arg Leu Ala Arg Arg Gly Gly Val Lys Arg Ile
    50              55              60

Ser Gly Leu Ile Tyr Glu Glu Thr Arg Gly Val Leu Lys Val Phe Leu
65              70              75              80

Glu Asn Val Ile Arg Asp Ala Val Xaa Tyr Thr Glu His Ala Lys Arg
            85              90              95

Lys Thr Val Thr Ala Met Asp Val Val Tyr Ala Leu Lys Arg Gln Gly
            100             105             110

Arg Thr Leu Tyr Gly Phe Gly Gly
        115             120
```

<210> 1295
<211> 174
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (155)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (158)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE

<222> (160)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (168)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1295
Lys Thr Gly Asn Gly Arg Val Tyr Pro His Pro Gln Asp Leu Leu Ala
 1   5   10   15

Ala Leu Pro Leu Ala Leu Val Leu Leu Ala Met Arg Leu Ala Phe Glu
            20   25   30

Lys Ile His Trp Pro Ala Pro Glu Pro Val Xaa Xaa Cys Glu Gly Ser
            35   40   45

Asp Gln Glu Ala Ser Glu Ala Gln Arg His Ala Gly Glu Thr Leu Pro
        50   55   60

His Gly Arg Ala Gln Ala Lys Glu Pro Gln Leu Ser Leu Leu Ala Ala
65   70   75   80

Gln Cys Gly Leu Thr Leu Gln Gln Thr Gln Arg Trp Phe Arg Arg Arg
                85   90   95

Arg Asn Gln Asp Arg Pro Gln Leu Thr Lys Lys Phe Cys Glu Ala Ser
            100   105   110

Trp Arg Phe Leu Phe Tyr Leu Ser Ser Phe Val Gly Gly Leu Ser Val
            115   120   125

Leu Tyr His Glu Ser Trp Leu Trp Ala Pro Val Met Cys Trp Asp Arg
        130   135   140

Tyr Pro Asn Gln Thr Leu Lys Pro Ser Leu Xaa Trp Trp Xaa Leu Xaa
145   150   155   160

Gly Ala Gly Phe Leu Thr Ser Xaa Cys Leu Ile Arg Cys Leu
                165   170

<210> 1296
<211> 286
<212> PRT
<213> Homo sapiens

<400> 1296
Ala His Ser Ser Ile Pro Ala Lys His Arg Asn Met Thr Glu Met Ser

```
    1                    5                      10                     15

    Phe Leu Ser Ser Glu Val Leu Val Gly Asp Leu Met Ser Pro Phe Asp
                 20                  25                  30

    Gln Ser Gly Leu Gly Ala Glu Glu Ser Leu Gly Leu Leu Asp Asp Tyr
                 35                  40                  45

    Leu Glu Val Ala Lys His Phe Lys Pro His Gly Phe Ser Ser Asp Lys
                 50                  55                  60

    Ala Lys Ala Gly Ser Ser Glu Trp Leu Ala Val Asp Gly Leu Val Ser
    65                  70                  75                      80

    Pro Ser Asn Asn Ser Lys Glu Asp Ala Phe Ser Gly Thr Asp Trp Met
                     85                  90                  95

    Leu Glu Lys Met Asp Leu Lys Glu Phe Asp Leu Asp Ala Leu Leu Gly
                 100                 105                 110

    Ile Asp Asp Leu Glu Thr Met Pro Asp Asp Leu Leu Thr Thr Leu Asp
                 115                 120                 125

    Asp Thr Cys Asp Leu Phe Ala Pro Leu Val Gln Glu Thr Asn Lys Gln
         130                 135                 140

    Pro Pro Gln Thr Val Asn Pro Ile Gly His Leu Pro Glu Ser Leu Thr
    145                 150                 155                 160

    Lys Pro Asp Gln Val Ala Pro Phe Thr Phe Leu Gln Pro Leu Pro Leu
                     165                 170                 175

    Ser Pro Gly Val Leu Ser Ser Thr Pro Asp His Ser Phe Ser Leu Glu
                 180                 185                 190

    Leu Gly Ser Glu Val Asp Ile Thr Glu Gly Asp Arg Lys Pro Asp Tyr
                 195                 200                 205

    Thr Ala Tyr Val Ala Met Ile Pro Gln Cys Ile Lys Glu Glu Asp Thr
         210                 215                 220

    Pro Ser Asp Asn Asp Ser Gly Ile Cys Met Ser Pro Glu Ser Tyr Leu
    225                 230                 235                 240

    Gly Ser Pro Gln His Ser Pro Ser Thr Arg Gly Ser Pro Asn Arg Ser
                     245                 250                 255

    Leu Pro Ser Ser Arg Cys Ser Leu Trp Val Cys Pro Ser Gln Thr Leu
                 260                 265                 270

    Arg Ser Ser Trp Arg Glu Asp Gly Ser Ser Lys Ser Lys Gly
```

275   280   285

<210> 1297
<211> 169
<212> PRT
<213> Homo sapiens

<400> 1297
Ala Ala Arg Gly Arg Ala Ala Ala Glu His Pro Ala Gly Ala Asp Ser
 1   5   10   15

Met Ala Ser Pro Asp Pro Pro Ala Thr Ser Tyr Ala Pro Ser Asp Val
                20   25   30

Pro Ser Gly Val Ala Leu Phe Leu Thr Ile Pro Phe Ala Phe Phe Leu
             35   40   45

Pro Glu Leu Ile Phe Gly Phe Leu Val Trp Thr Met Val Ala Ala Thr
         50   55   60

His Ile Val Tyr Pro Leu Leu Gln Gly Trp Val Met Tyr Val Ser Leu
65   70   75   80

Thr Ser Phe Leu Ile Ser Leu Met Phe Leu Leu Ser Tyr Leu Phe Gly
                85   90   95

Phe Tyr Lys Arg Phe Glu Ser Trp Arg Val Leu Asp Ser Leu Tyr His
             100   105   110

Gly Thr Thr Gly Ile Leu Tyr Met Ser Ala Ala Val Leu Gln Val His
         115   120   125

Ala Thr Ile Val Ser Glu Lys Leu Leu Asp Pro Arg Ile Tyr Tyr Ile
     130   135   140

Asn Ser Ala Ala Ser Phe Phe Ala Phe Ile Ala Thr Leu Leu Tyr Ile
145   150   155   160

Leu His Ala Phe Ser Ile Tyr Tyr His
                165

<210> 1298
<211> 164
<212> PRT
<213> Homo sapiens

<400> 1298

```
Ala Leu Arg Asn Glu Met Ala Val Leu Trp Arg Leu Ser Ala Val Cys
 1               5                   10                  15

Gly Ala Leu Gly Gly Arg Ala Leu Leu Leu Arg Thr Pro Val Val Arg
             20              25                  30

Pro Ala His Ile Ser Ala Phe Leu Gln Asp Arg Pro Ile Pro Glu Trp
             35              40                  45

Cys Gly Val Gln His Ile His Leu Ser Pro Ser His His Ser Gly Ser
     50              55                  60

Lys Ala Ala Ser Leu His Trp Thr Ser Glu Arg Val Val Ser Val Leu
 65              70                  75                  80

Leu Leu Gly Leu Leu Pro Ala Ala Tyr Leu Asn Pro Cys Ser Ala Met
             85                  90                  95

Asp Tyr Ser Leu Ala Ala Ala Leu Thr Leu His Gly His Trp Gly Leu
             100             105                 110

Gly Gln Val Val Thr Asp Tyr Val His Gly Asp Ala Leu Gln Lys Ala
         115             120                 125

Ala Lys Ala Gly Leu Leu Ala Leu Ser Ala Leu Thr Phe Ala Gly Leu
     130             135                 140

Cys Tyr Phe Asn Tyr His Asp Val Gly Ile Cys Lys Ala Val Ala Met
145             150                 155                 160

Leu Trp Lys Leu
```

<210> 1299
<211> 717
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (147)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE
<222> (181)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (232)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (379)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (389)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (671)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1299
Val Cys Leu Gln Arg Asp Ala Pro Arg Gly Gln Ala Arg Ser Pro Gly
 1   5   10   15

Glu Ala Gln Glu Pro Glu Glu Leu Ala Arg Arg Gln Arg Arg His Pro
             20   25   30

Glu Leu Ser Gln Gly Glu Xaa Val Ala Ser Val Ile Ile Tyr Arg Thr
         35   40   45

Leu Ala Gly Leu Leu Pro His Asn Tyr Asp Pro Asp Lys Arg Ser Leu
     50   55   60

Arg Val Pro Lys Arg Pro Ile Ile Asn Thr Pro Val Val Ser Ile Ser
65   70   75   80

Val His Asp Asp Glu Glu Leu Leu Pro Arg Ala Leu Asp Lys Pro Val
             85   90   95

Thr Val Gln Phe Arg Leu Leu Glu Thr Glu Glu Arg Thr Lys Pro Ile
             100   105   110

Cys Val Phe Trp Asn His Ser Ile Leu Val Ser Gly Thr Gly Gly Trp
             115   120   125

Ser Ala Arg Gly Cys Glu Val Val Phe Arg Asn Glu Ser His Val Ser
     130   135   140

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```
Cys Gln Xaa Asn His Met Thr Ser Phe Ala Val Leu Met Asp Val Ser
145             150             155             160

Arg Arg Glu Asn Gly Glu Ile Leu Pro Leu Lys Thr Leu Thr Tyr Val
                165             170             175

Ala Leu Gly Val Xaa Leu Ala Ala Leu Leu Leu Thr Phe Phe Phe Leu
                180             185             190

Thr Leu Leu Arg Ile Leu Arg Ser Asn Gln His Gly Ile Arg Arg Asn
        195             200             205

Leu Thr Ala Ala Leu Gly Leu Ala Gln Leu Val Phe Leu Leu Gly Ile
    210             215             220

Asn Gln Ala Asp Leu Pro Phe Xaa Cys Thr Val Ile Ala Ile Leu Leu
225             230             235             240

His Phe Leu Tyr Leu Cys Thr Phe Ser Trp Ala Leu Leu Glu Ala Leu
            245             250             255

His Leu Tyr Arg Ala Leu Thr Glu Val Arg Asp Val Asn Thr Gly Pro
            260             265             270

Met Arg Phe Tyr Tyr Met Leu Gly Trp Gly Val Pro Ala Phe Ile Thr
    275             280             285

Gly Leu Ala Val Gly Leu Asp Pro Glu Gly Tyr Gly Asn Pro Asp Phe
    290             295             300

Cys Trp Leu Ser Ile Tyr Asp Thr Leu Ile Trp Ser Phe Gly Gly Pro
305             310             315             320

Val Ala Phe Ala Val Ser Met Ser Val Phe Leu Tyr Ile Leu Ala Ala
                325             330             335

Arg Ala Ser Cys Ala Ala Gln Arg Gln Gly Phe Glu Lys Lys Gly Pro
            340             345             350

Val Ser Gly Leu Gln Pro Ser Phe Ala Val Leu Leu Leu Leu Ser Ala
        355             360             365

Thr Trp Leu Leu Ala Leu Leu Ser Val Asn Xaa Asp Thr Leu Leu Phe
    370             375             380

His Tyr Leu Phe Xaa Thr Cys Asn Cys Ile Gln Gly Pro Phe Ile Phe
385             390             395             400

Leu Ser Tyr Val Val Leu Ser Lys Glu Val Arg Lys Ala Leu Lys Leu
            405             410             415
```

```
Ala Cys Ser Arg Lys Pro Ser Pro Asp Pro Ala Leu Thr Thr Lys Ser
            420             425                 430

Thr Leu Thr Ser Ser Tyr Asn Cys Pro Ser Pro Tyr Ala Asp Gly Arg
        435             440                 445

Leu Tyr Gln Pro Tyr Gly Asp Ser Ala Gly Ser Leu His Ser Thr Ser
    450             455                 460

Arg Ser Gly Lys Ser Gln Pro Ser Tyr Ile Pro Phe Leu Leu Arg Glu
465             470             475                 480

Glu Ser Ala Leu Asn Pro Gly Gln Gly Pro Pro Gly Leu Gly Asp Pro
            485             490                 495

Gly Ser Leu Phe Leu Glu Gly Gln Asp Gln Gln His Asp Pro Asp Thr
        500             505                 510

Asp Ser Asp Ser Asp Leu Ser Leu Glu Asp Asp Gln Ser Gly Ser Tyr
        515             520                 525

Ala Ser Thr His Ser Ser Asp Ser Glu Glu Glu Glu Glu Glu Glu Glu
    530             535                 540

Glu Glu Ala Ala Phe Pro Gly Glu Gln Gly Trp Asp Ser Leu Leu Gly
545             550             555                 560

Pro Gly Ala Glu Arg Leu Pro Leu His Ser Thr Pro Lys Asp Gly Gly
            565             570                 575

Pro Gly Pro Gly Lys Ala Pro Trp Pro Gly Asp Phe Gly Thr Thr Ala
            580             585                 590

Lys Glu Ser Ser Gly Asn Gly Ala Pro Glu Glu Arg Leu Arg Glu Asn
        595             600                 605

Gly Asp Ala Leu Ser Arg Glu Gly Ser Leu Gly Pro Leu Pro Gly Ser
    610             615                 620

Ser Ala Gln Pro His Lys Gly Ile Leu Lys Lys Lys Cys Leu Pro Thr
625             630             635                 640

Ile Ser Glu Lys Ser Ser Leu Leu Arg Leu Pro Leu Glu Gln Cys Thr
            645             650                 655

Gly Ser Ser Arg Gly Ser Ser Ala Ser Glu Gly Ser Arg Gly Xaa Pro
            660             665                 670

Pro Pro Arg Pro Pro Pro Arg Gln Ser Leu Gln Glu Gln Leu Asn Gly
            675             680                 685
```

```
Val Met Pro Ile Ala Met Ser Ile Lys Ala Gly Thr Val Asp Glu Asp
    690                 695             700

Ser Ser Gly Ser Glu Phe Leu Phe Phe Asn Phe Leu His
705                 710             715



<210> 1300
<211> 145
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (111)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (112)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (124)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (125)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1300
Ala Ser Arg Asn Ala Asp Leu Ser Ile Thr Leu Gly Thr Ser Leu Gln
```

```
         1                   5                        10                           15

      Ile Arg Pro Ser Gly Asn Leu Pro Xaa Ala Thr Lys Arg Arg Xaa Gly
                    20                  25                  30

      Arg Leu Val Ile Val Asn Leu Gln Pro Thr Lys His Asp Arg His Ala
                    35                  40                  45

      Asp Leu Arg Ile His Gly Tyr Val Asp Glu Val Met Thr Arg Leu Met
                50                  55                  60

      Lys His Leu Gly Leu Glu Ile Pro Ala Trp Asp Gly Pro Arg Val Leu
      65              70                  75                  80

      Glu Arg Ala Leu Pro Pro Leu Pro Ala Arg Pro Pro Pro Ser Trp Ser
                        85                  90                  95

      Pro Arg Arg Asn Leu Pro Pro Gly Ser Thr Ala Leu Ser Pro Xaa Xaa
                    100                 105                 110

      Pro Ser Arg Xaa Pro Ala Pro Ser Thr Thr Ala Xaa Xaa Pro Pro Ala
                    115                 120                 125

      Pro Asn Gly Ser Gly Pro Pro Ala Leu Pro Pro Thr Asp Pro Pro Lys
                    130                 135                 140

      Gly
      145
```

```
<210> 1301
<211> 68
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1301
Thr Arg Cys Leu Leu Lys Ile Gln Lys Ile Ser Gln Val Trp Trp His
  1           5                   10                  15

Asn Ala Val Ile Pro Ala Thr Gln Glu Ala Glu Ala Gly Glu Ser Leu
```

```
                    20                      25                      30
    Glu Pro Gly Arg Trp Glu Val Thr Val Ser Gln Val Cys Ala Thr Ala
            35                      40                      45

    Phe Gln Pro Gly Leu Ile Glu Trp Asp Phe Arg Leu Gln Lys Lys Lys
            50                      55                      60

    Lys Lys Xaa Xaa
        65
```

```
<210> 1302
<211> 60
<212> PRT
<213> Homo sapiens

<400> 1302
Lys Tyr Pro Val Pro Arg Pro Leu Phe Thr His Ala Cys Lys Phe Thr
 1               5                   10                  15

Gly Lys Thr Leu Glu Thr Asn Val Leu Ser Ser Thr Glu Ile Trp Pro
            20                      25                      30

Ser Ser Leu Phe Leu Asn Cys Ser Leu Cys Val Arg His Ile Cys Leu
            35                      40                      45

Ile Pro His Ser Ala Leu Thr Phe Arg Gln Ile Arg
        50                      55                      60
```

```
<210> 1303
<211> 107
<212> PRT
<213> Homo sapiens

<400> 1303
Arg Ser Asp Ser Arg Ser Thr His Ala Ser Gly Arg Leu Arg Thr Ala
 1               5                   10                  15

Gln Leu Ala Pro Pro Gly Leu Gly Arg Thr Arg Ser Gly Phe Ser Ser
            20                      25                      30

Cys Arg Pro Tyr Gly Ala Val Phe Ser Leu Ser Arg Gly Val Arg Ala
            35                      40                      45

Ser His Ala Gly Pro Gly Arg Glu Lys Ser Lys Ala Cys Arg Gly Cys
        50                      55                      60
```

```
Arg Glu Lys Thr Lys Arg Gly Cys Ile Ser Gly Asn Phe Arg Cys Ser
65                  70              75                  80

Ile Cys Ala Arg Lys Glu Lys Glu Lys Gly Lys Asn Arg Lys Thr Asn
              85              90                  95

Cys Tyr Ile Arg Ala Pro Thr Arg Arg Trp Thr
          100             105
```

```
<210> 1304
<211> 69
<212> PRT
<213> Homo sapiens

<400> 1304
Lys His Ile Phe Trp Leu Ala Glu Lys Asn Lys Thr Lys Leu Leu Phe
1               5               10              15

Leu Phe Leu Ala Leu Arg Val Tyr Ser Lys Arg Asp Phe Phe Glu Leu
              20              25              30

Phe Leu Tyr Tyr Phe Ser Phe Asn Cys Ala Val Val His Glu Thr Glu
          35              40              45

Leu Leu Cys Phe Ser Val Arg Asp Gly Lys Gly Phe Phe Ser Ile Ser
      50              55              60

Phe Met Cys Gly Ile
 65
```

```
<210> 1305
<211> 75
<212> PRT
<213> Homo sapiens

<400> 1305
Lys Asn Val Ile Gly Thr Ile Asn Lys Asp Cys Glu Arg Leu Phe Lys
1               5               10              15

Ser Cys Glu Ser Leu Lys Pro Ile Ser Gln Gly Val Pro Cys Leu Asn
              20              25              30

Leu Leu Leu Phe Pro Gln Arg Thr Lys Pro Val His Lys Leu Pro Lys
          35              40              45

Leu Pro Phe Trp Arg Trp Lys Leu Thr Arg Arg Glu Gly Leu Leu Leu
      50              55              60
```

```
Glu Ser Ile Gln Tyr Lys Gln Ile Ile Leu Pro
 65                 70                 75
```

<210> 1306
<211> 44
<212> PRT
<213> Homo sapiens

<400> 1306
```
Pro Thr Trp Arg Asn Pro Val Ser Thr Lys Asn Thr Lys Ile Ser Trp
 1               5               10                  15

Ala Leu Trp Arg Ala Pro Val Ile Pro Ala Thr Trp Glu Ala Glu Ala
            20              25              30

Glu Glu Ser Leu Lys Pro Arg Arg Arg Arg Leu Gln
            35              40
```

<210> 1307
<211> 105
<212> PRT
<213> Homo sapiens

<400> 1307
```
Arg Leu Cys Ala Phe Asn Lys Arg Met Thr Phe Gln Phe Asn Phe Thr
 1               5               10                  15

Ile Glu Asp His Leu Glu Asn Glu Leu Thr Pro Ile Arg Asp Gly Ala
            20              25              30

Leu Thr Leu Asp Ser Ser Lys Glu Leu Ser Val Ser Glu Ser Gln Lys
            35              40              45

Gly Glu Glu Arg Asp Arg Lys Cys Ser Ala Glu Gln Phe Asp Leu Pro
    50              55              60

Gln Asp His Leu Trp Glu His Lys Ser Met Glu Asn Ala Ala Pro Ser
 65              70              75              80

Gln Asp Thr Asp Ser Pro Leu Ser Ala Ala Ser Ser Ser Arg Asn Leu
            85              90              95

Gly Ala Thr Trp Glu Asn Ser Pro Pro
            100             105
```

```
<210> 1308
<211> 75
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1308
Gly Arg Ala His Ala Ile Thr Val Ser Val Ala Asn Xaa Lys Ala Leu
 1               5                   10                  15

Ala Lys Cys Glu Lys Tyr Met Leu Thr His Gln Glu Leu Ala Ser Asp
                20                  25                  30

Gly Glu Ile Glu Thr Lys Leu Ile Lys Gly Asp Ile Tyr Lys Thr Arg
                35                  40                  45

Gly Gly Gly Gln Ser Val Gln Phe Thr Asp Ile Glu Thr Leu Lys Gln
        50                  55                  60

Glu Ser Pro Asn Gly Val Leu Trp Leu Trp Arg
65                  70                  75
```

```
<210> 1309
<211> 231
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (178)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1309
Leu Glu Arg Phe Ala Ser Arg Arg Pro Gln Val Leu Ala Val Arg Thr
 1               5                   10                  15

Val Cys Asp Leu Val Leu Gly Lys Met Asp Lys Asp Cys Glu Met Lys
                20                  25                  30

Arg Thr Thr Leu Asp Ser Pro Leu Gly Lys Leu Glu Leu Ser Gly Cys
                35                  40                  45

Glu Gln Gly Leu His Glu Ile Lys Leu Leu Gly Lys Gly Thr Ser Ala
        50                  55                  60
```

```
Ala Asp Ala Val Glu Val Pro Ala Pro Ala Ala Val Leu Gly Gly Pro
65              70          75                      80

Glu Pro Leu Met Gln Cys Thr Ala Trp Leu Asn Ala Tyr Phe His Gln
            85              90              95

Pro Glu Ala Ile Glu Glu Phe Pro Val Pro Ala Leu His His Pro Val
            100             105             110

Phe Gln Gln Glu Ser Phe Thr Arg Gln Val Leu Trp Lys Leu Leu Lys
        115             120             125

Val Val Lys Phe Gly Glu Val Ile Ser Tyr Gln Gln Leu Ala Ala Leu
    130             135             140

Ala Gly Asn Pro Lys Ala Ala Arg Ala Val Gly Gly Ala Met Arg Gly
145             150             155             160

Asn Pro Val Pro Ile Leu Ile Pro Cys His Arg Val Val Cys Ser Ser
            165             170             175

Gly Xaa Val Gly Asn Tyr Ser Gly Gly Leu Ala Val Lys Glu Trp Leu
        180             185             190

Leu Ala His Glu Gly His Arg Leu Gly Lys Pro Gly Leu Gly Gly Ser
        195             200             205

Ser Gly Leu Ala Gly Ala Trp Leu Lys Gly Ala Gly Ala Thr Ser Gly
    210             215             220

Ser Pro Pro Ala Gly Arg Asn
225             230
```

<210> 1310
<211> 110
<212> PRT
<213> Homo sapiens

<400> 1310

```
Pro Val Leu Thr Pro Ala Thr Leu Ile Tyr Phe Ser Ile Asn Cys Leu
 1              5               10              15

Ser Gly Ser Gln Ser Trp Asn His His Ser Gly Arg Gly Leu Ala Cys
            20              25              30

Thr Arg Met Phe Glu Val Val Ser Ser Thr Ser Gly Leu Ser Ile Cys
            35              40              45
```

Gly Glu Arg Cys Val Ala Ile Ala Ala Gly Leu His Gly His Leu Ser
    50   55   60

Thr Thr Arg Val Leu Trp Thr Trp Ser Asn His Arg Glu Arg Leu Arg
65   70   75   80

Val Glu Phe Cys Leu Cys Arg Gly Thr Gly Ala Val Trp Trp Glu Arg
                85   90   95

Pro Val Pro Gly Glu Thr Leu Glu Thr Leu Arg Glu Pro Leu
            100   105   110

<210> 1311
<211> 139
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1311
Ala Val Val Thr Ala Xaa Gln Val Pro Lys Gln Val Ser Trp Val Gln
 1   5   10   15

Gln Asp Thr Pro Pro Phe Gln Gly Ser Trp Tyr Arg Gln Lys Gln Glu
                20   25   30

Trp Val Leu Ser Cys Cys Arg His Thr Ala Val Val Phe Leu Gln Leu
            35   40   45

Ser Asn Lys Arg Leu Ser His Arg Pro Glu Leu Pro Trp Tyr Val Val
    50   55   60

Lys Ser Lys Thr Ser Ser Leu Gly Tyr Leu Ser Ser Phe Met Lys Gln
65   70   75   80

Val Leu Arg Thr Arg Lys Asn His Leu Pro Pro Ser Phe Val Arg Gln
                85   90   95

Asn Gln Val Lys Gly Asn Met Leu Glu Asn Val Pro Arg Glu Asp Thr
                100   105   110

Ser Thr Phe Ala Leu Ser Asn Pro Ser Ser Glu Lys Gly Val Pro Trp
            115   120   125

Pro Gln Lys Glu Leu Pro Ser Phe Gly Glu Glu
    130   135

```
<210> 1312
<211> 231
<212> PRT
<213> Homo sapiens

<400> 1312
Ala Glu Ala Glu Val Thr Pro Pro Glu Glu Gln Gln Glu Ala Glu Glu
 1               5                  10                  15

Pro Lys Ala Arg Val Leu Arg Ser Lys Ser Leu Cys His Asp Glu Ile
            20              25              30

Glu Asn Leu Leu Asp Ser Asp His Arg Glu Leu Ile Gly Asp Tyr Ser
        35              40              45

Lys Ala Phe Leu Leu Gln Thr Val Asp Gly Lys His Gln Asp Leu Lys
    50              55              60

Tyr Ile Ser Pro Glu Thr Met Val Ala Leu Leu Thr Gly Lys Phe Ser
65              70              75                  80

Asn Ile Val Asp Lys Phe Val Ile Val Asp Cys Arg Tyr Pro Tyr Glu
            85                  90                  95

Tyr Glu Gly Gly His Ile Lys Thr Ala Val Asn Leu Pro Leu Glu Arg
            100             105             110

Asp Ala Glu Ser Phe Leu Leu Lys Ser Pro Ile Ala Pro Cys Ser Leu
        115             120             125

Asp Lys Arg Val Ile Leu Ile Phe His Cys Glu Phe Ser Ser Glu Arg
    130             135             140

Gly Pro Arg Met Cys Arg Phe Ile Arg Glu Arg Asp Arg Ala Val Asn
145             150             155             160

Asp Tyr Pro Ser Leu Tyr Tyr Pro Glu Met Tyr Ile Leu Lys Gly Gly
            165             170             175

Tyr Lys Glu Phe Phe Pro Gln His Pro Asn Phe Cys Glu Pro Gln Asp
            180             185             190

Tyr Arg Pro Met Asn His Glu Ala Phe Lys Asp Glu Leu Lys Thr Phe
            195             200             205

Arg Leu Lys Thr Arg Ser Trp Ala Gly Glu Arg Ser Arg Arg Glu Leu
        210             215             220
```

```
Cys Ser Arg Leu Gln Asp Gln
225                 230
```

```
<210> 1313
<211> 312
<212> PRT
<213> Homo sapiens
```

```
<400> 1313
Ala Ala Val Ile Pro Ser Leu Gly Phe Leu Pro Gly Leu Pro Arg Ala
 1               5                   10                  15

Arg Ser Arg Ala Gly Pro Glu Gln Pro Lys Met Ala Asp Phe Asp Asp
             20              25                  30

Arg Val Ser Asp Glu Glu Lys Val Arg Ile Ala Ala Lys Phe Ile Thr
         35              40                  45

His Ala Pro Pro Gly Glu Phe Asn Glu Val Phe Asn Asp Val Arg Leu
     50              55                  60

Leu Leu Asn Asn Asp Asn Leu Leu Arg Glu Gly Ala Ala His Ala Phe
 65              70              75                  80

Ala Gln Tyr Asn Met Asp Gln Phe Thr Pro Val Lys Ile Glu Gly Tyr
             85                  90                  95

Glu Asp Gln Val Leu Ile Thr Glu His Gly Asp Leu Gly Asn Ser Arg
             100                 105                 110

Phe Leu Asp Pro Arg Asn Lys Ile Ser Phe Lys Phe Asp His Leu Arg
         115                 120                 125

Lys Glu Ala Ser Asp Pro Gln Pro Glu Glu Ala Asp Gly Gly Leu Lys
     130                 135                 140

Ser Trp Arg Glu Ser Cys Asp Ser Ala Leu Arg Ala Tyr Val Lys Asp
145                 150                 155                 160

His Tyr Ser Asn Gly Phe Cys Thr Val Tyr Ala Lys Thr Ile Asp Gly
             165                 170                 175

Gln Gln Thr Ile Ile Ala Cys Ile Glu Ser His Gln Phe Gln Pro Lys
             180                 185                 190

Asn Phe Trp Asn Gly Arg Trp Arg Ser Glu Trp Lys Phe Thr Ile Thr
         195                 200                 205

Pro Pro Thr Ala Gln Val Val Gly Val Leu Lys Ile Gln Val His Tyr
```

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              210                    215                    220

     Tyr Glu Asp Gly Asn Val Gln Leu Val Ser His Lys Asp Val Gln Asp
     225           .         230                235                240

     Ser Leu Thr Val Ser Asn Glu Ala Gln Thr Ala Lys Glu Phe Ile Lys
                     245              250                 255

     Ile Ile Glu Asn Ala Glu Asn Glu Tyr Gln Thr Ala Ile Ser Glu Asn
                 260                  265                 270

     Tyr Gln Thr Met Ser Asp Thr Thr Phe Lys Ala Leu Arg Arg Gln Leu
             275                  280                285

     Pro Val Thr Arg Thr Lys Ile Asp Trp Asn Lys Ile Leu Ser Tyr Lys
             290                  295                 300

     Ile Gly Lys Glu Met Gln Asn Ala
     305                 310
```

<210> 1314
<211> 260
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (234)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (246)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (249)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (256)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1314
```
Ala Phe Asn Ala Leu Val Thr Phe Cys Ile Arg Asp Leu Ile Gly Cys
  1             5              10                 15
```

Leu Gln Lys Leu Leu Phe Gly Lys Val Ala Lys Asp Ser Ser Arg Met
            20   25   30

Leu Gln Pro Ser Ser Ser Pro Leu Trp Gly Lys Leu Arg Val Asp Ile
            35   40   45

Lys Ala Tyr Leu Gly Ser Ala Ile Gln Leu Val Ser Cys Leu Ser Glu
        50   55   60

Thr Thr Val Leu Ala Ala Val Leu Arg His Ile Ser Val Leu Val Pro
65   70   75   80

Cys Phe Leu Thr Phe Pro Lys Gln Cys Arg Met Leu Leu Lys Arg Met
                85   90   95

Val Val Val Trp Ser Thr Gly Glu Glu Ser Leu Arg Val Leu Ala Phe
            100   105   110

Leu Val Leu Ser Arg Val Cys Arg His Lys Lys Asp Thr Phe Leu Gly
            115   120   125

Pro Val Leu Lys Gln Met Tyr Ile Thr Tyr Val Arg Asn Cys Lys Phe
    130   135   140

Thr Ser Pro Gly Ala Leu Pro Phe Ile Ser Phe Met Gln Trp Thr Leu
145   150   155   160

Thr Glu Leu Leu Ala Leu Glu Pro Gly Val Ala Tyr Gln His Ala Phe
                165   170   175

Leu Tyr Ile Arg Gln Leu Ala Ile His Leu Arg Asn Ala Met Thr Thr
            180   185   190

Arg Lys Lys Glu Thr Tyr Gln Ser Val Tyr Asn Trp Gln Tyr Val His
        195   200   205

Cys Leu Phe Leu Trp Cys Arg Val Leu Ser Thr Ala Gly Pro Ser Glu
    210   215   220

Ala Ser Ser Pro Trp Ser Asn Pro Leu Xaa Pro Ser His His Trp Leu
225   230   235   240

Tyr Gln Ala His Pro Xaa Cys Pro Xaa Leu Thr Arg Cys Glu Cys Xaa
                245   250   255

Ala Ser Val Ala
            260

<210> 1315

```
<211> 194
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (158)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (160)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (174)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (175)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (183)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (189)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (193)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1315
Arg Ser Arg Leu Trp Ala Pro Val Arg Glu Ser His Thr Tyr Leu Arg
 1               5                  10                  15

Met Pro Gly Leu Ser Cys Arg Phe Tyr Gln His Lys Phe Pro Glu Val
              20              25                  30

Glu Asp Val Val Met Val Asn Val Arg Ser Ile Ala Glu Met Gly Ala
              35              40                  45

Tyr Val Ser Leu Leu Glu Tyr Asn Asn Ile Glu Gly Met Ile Leu Leu
         50              55                  60
```

```
Ser Glu Leu Ser Arg Arg Arg Ile Arg Ser Ile Asn Lys Leu Ile Arg
 65                  70              75                  80

Ile Gly Arg Asn Glu Cys Val Val Val Ile Arg Val Asp Lys Glu Lys
                 85              90              95

Gly Tyr Ile Asp Leu Ser Lys Arg Arg Val Ser Pro Glu Glu Ala Ile
            100             105             110

Lys Cys Glu Asp Lys Phe Thr Lys Ser Lys Thr Val Tyr Ser Ile Leu
        115             120             125

Arg His Val Ala Glu Val Leu Glu Tyr Thr Lys Asp Glu Gln Leu Glu
    130             135             140

Ser Leu Phe Gln Arg Thr Ala Trp Val Phe Asp Asp Lys Xaa Lys Xaa
145             150             155             160

Pro Gly Tyr Gly Ala Tyr Asp Ala Phe Lys His Ala Ala Xaa Xaa Pro
            165             170             175

Ser Asn Phe Gly Lys Val Xaa Ile Gly Met Lys Ile Xaa Arg Glu Arg
            180             185             190

Xaa His
```

```
<210> 1316
<211> 59
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1316
Ala Lys Ile Ser Gln Glu Lys Xaa Phe His Lys Xaa Met Ser Ser Val
 1               5                   10                  15

Lys Ala Arg Thr Gly His Xaa Xaa Phe Phe Cys Gly Gly Met Ser Ser
            20                  25                  30

Val Lys Xaa Gly Gln Gly Ile Phe Thr Ser Phe Xaa Ile Leu Gln Leu
        35                  40                  45

Leu Gln Ala Ile Trp Ala Xaa Thr Cys Xaa Ser
     50                  55


<210> 1317
<211> 194
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1317
Gly Cys Gly Asp Xaa Arg Ala Ala Thr Thr Thr Ala Leu Ile Ser Val
```

```
        1                   5                    10                       15
      Val Thr Thr Ala Ser Ala Gly Gly Glu Asp Glu Ser Ser Arg Ile Glu
                  20                  25                  30

      Leu Gly Asp Val Thr Pro His Asn Ile Lys Gln Leu Lys Arg Leu Asn
                  35                  40                  45

      Gln Val Ile Phe Pro Val Ser Tyr Asn Asp Lys Phe Tyr Lys Asp Val
                  50                  55                  60

      Leu Glu Val Gly Glu Leu Ala Lys Leu Ala Tyr Phe Asn Asp Ile Ala
      65                  70                  75                  80

      Val Gly Ala Val Cys Cys Arg Val Asp His Ser Gln Asn Gln Lys Arg
                  85                  90                  95

      Leu Tyr Ile Met Thr Leu Gly Cys Leu Ala Pro Tyr Arg Arg Leu Gly
                  100                 105                 110

      Ile Gly Thr Lys Met Leu Asn His Val Leu Asn Ile Cys Glu Lys Asp
                  115                 120                 125

      Gly Thr Phe Asp Asn Ile Tyr Leu His Val Gln Ile Ser Asn Glu Ser
          130                 135                 140

      Ala Ile Asp Phe Tyr Arg Lys Phe Gly Phe Glu Ile Ile Glu Thr Lys
      145                 150                 155                 160

      Lys Asn Tyr Tyr Lys Arg Ile Glu Pro Ala Asp Ala His Val Leu Gln
                  165                 170                 175

      Lys Asn Leu Lys Val Pro Ser Gly Gln Asn Ala Asp Val Gln Lys Thr
                  180                 185                 190

      Asp Asn
```

```
<210> 1318
<211> 60
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids


<400> 1318
Thr His Leu Phe Val Leu Leu Pro Xaa Asp Thr Phe Ser Thr Ser Cys
 1               5                10                   15


Pro Ser Thr Val Arg His Ile Gln Ala Pro Arg Ser Trp Ser Pro Asn
             20                25                   30


Thr Leu Lys Asn His Glu Phe Ile Xaa Met Val Ser Gln Ser Pro Asn
             35                40                   45


Gln Pro Asn Gln Thr Cys Tyr Leu Val Leu Leu Gly
     50                  55                   60



<210> 1319
<211> 106
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (57)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (61)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1319
Ala Arg Pro Pro Ala Ala Arg Thr Gly Val Ala Gly Gly Gly Ala Pro
 1               5                10                   15


Val Arg Lys Pro Gly Ile Arg Gly His Asp Gly Ala Gly Pro Arg Leu
             20                25                   30


Leu Ala Ala Pro Arg Pro Pro Trp Pro Ser Ala Gly Val Gly Gln Lys
             35                40                   45


His Ser Thr Leu Arg Lys Gly Thr Xaa Arg Ala Arg Xaa Cys Val Pro
     50                  55                   60


Gly Leu Ser Glu Gln Arg Cys Glu Asp Gln Gln Arg Glu Glu Ile Pro
 65                  70                   75                   80


Ser Ser Arg Gly Cys His Cys Leu Pro Pro His Leu Ser Pro Ser Thr
```

```
                    85                    90                    95

     Val Ile Phe Phe Ile Tyr Ile Met Thr His
                100                    105




     <210> 1320
     <211> 402
     <212> PRT
     <213> Homo sapiens

     <220>
     <221> SITE
     <222> (6)
     <223> Xaa equals any of the naturally occurring L-amino acids

     <400> 1320
     Gly Thr Arg Glu Pro Xaa Leu Leu Ala Glu Leu Lys Pro Gly Arg Pro
      1               5              10                  15

     His Gln Phe Asp Trp Lys Ser Ser Cys Glu Thr Trp Ser Val Ala Phe
                20                  25                  30

     Ser Pro Asp Gly Ser Trp Phe Ala Trp Ser Gln Gly His Cys Ile Val
                35                  40                  45

     Lys Leu Ile Pro Trp Pro Leu Glu Glu Gln Phe Ile Pro Lys Gly Phe
                50                  55                  60

     Glu Ala Lys Ser Arg Ser Ser Lys Asn Glu Thr Lys Gly Arg Gly Ser
      65              70                  75                  80

     Pro Lys Glu Lys Thr Leu Asp Cys Gly Gln Ile Val Trp Gly Leu Ala
                    85                  90                  95

     Phe Ser Pro Trp Pro Ser Pro Pro Ser Arg Lys Leu Trp Ala Arg His
                100                 105                 110

     His Pro Gln Val Pro Asp Val Ser Cys Leu Val Leu Ala Thr Gly Leu
                115                 120                 125

     Asn Asp Gly Gln Ile Lys Ile Trp Glu Val Gln Thr Gly Leu Leu Leu
                130                 135                 140

     Leu Asn Leu Ser Gly His Gln Asp Val Val Arg Asp Leu Ser Phe Thr
     145                 150                 155                 160

     Pro Ser Gly Ser Leu Ile Leu Val Ser Ala Ser Arg Asp Lys Thr Leu
                    165                 170                 175
```

```
Arg Ile Trp Asp Leu Asn Lys His Gly Lys Gln Ile Gln Val Leu Ser
            180             185         190

Gly His Leu Gln Trp Val Tyr Cys Cys Ser Ile Ser Pro Asp Cys Ser
        195             200         205

Met Leu Cys Ser Ala Ala Gly Glu Lys Ser Val Phe Leu Trp Ser Met
    210             215             220

Arg Ser Tyr Thr Leu Ile Arg Lys Leu Glu Gly His Gln Ser Ser Val
225             230             235             240

Val Ser Cys Asp Phe Ser Pro Asp Ser Ala Leu Leu Val Thr Ala Ser
            245             250             255

Tyr Asp Thr Asn Val Ile Met Trp Asp Pro Tyr Thr Gly Glu Arg Leu
            260             265             270

Arg Ser Leu His His Thr Gln Val Asp Pro Ala Met Asp Asp Ser Asp
        275             280             285

Val His Ile Ser Ser Leu Arg Ser Val Cys Phe Ser Pro Glu Gly Leu
    290             295             300

Tyr Leu Ala Thr Val Ala Asp Asp Arg Leu Leu Arg Ile Trp Ala Leu
305             310             315             320

Glu Leu Lys Thr Pro Ile Ala Phe Ala Pro Met Thr Asn Gly Leu Cys
            325             330             335

Cys Thr Phe Phe Pro His Gly Gly Val Ile Ala Thr Gly Thr Arg Asp
            340             345             350

Gly His Val Gln Phe Trp Thr Ala Pro Arg Val Leu Ser Ser Leu Lys
        355             360             365

His Leu Cys Arg Lys Ala Leu Arg Ser Phe Leu Thr Thr Tyr Gln Val
    370             375             380

Leu Ala Leu Pro Ile Pro Lys Lys Met Lys Glu Phe Leu Thr Tyr Arg
385             390             395             400

Thr Phe
```

<210> 1321
<211> 88
<212> PRT
<213> Homo sapiens

<400> 1321

Val Trp Gln Gly Thr Leu Leu Leu Ala Ser Pro Pro Arg Arg Glu Val
 1   5   10   15

Asp Met Thr Ser Pro Pro Pro His Gln Gly Trp Glu Gln Arg Gly Cys
             20   25   30

Gly Glu Ser Gln Val Pro Leu Ala Leu Ser Arg Val Phe Ser Thr Ser
         35   40   45

His Tyr Cys Leu Leu Leu Val Ala Asn Gln Ser Ile Phe Phe Pro Cys
     50   55   60

Leu Trp Ala Val Glu Ser Ala Ala Gly Cys Thr Leu His Leu Pro Thr
 65   70   75   80

Glu Leu Gly Lys Glu Asp Asn Gln
             85

<210> 1322
<211> 284
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (232)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (237)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (250)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (262)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (265)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (269)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1322
Arg Thr Arg Gly Gly Arg Val Gly Ala Tyr Glu His Pro Gly Ser Ser
 1               5                   10                  15

Leu Phe Pro Glu Gly Pro Asn Asp Tyr Val Phe Ser His Leu Pro Leu
            20              25              30

His Ser Gln Gln Gln Val Arg Ala Pro Ile Pro Met Val Pro Val Gly
        35              40              45

Gly Ile Gln Met Val His Ser Met Pro Pro Ala Leu Ser Ser Leu His
    50              55              60

Pro Ser Pro Thr Leu Pro Leu Pro Met Glu Gly Phe Glu Glu Lys Lys
65              70              75              80

Gly Ala Ser Gly Glu Ser Phe Ser Lys Asp Pro Tyr Val Leu Ser Lys
            85              90              95

Gln His Glu Lys Arg Gly Pro His Ala Leu Gln Ser Ser Gly Pro Pro
            100             105             110

Ser Thr Pro Ser Ser Pro Arg Leu Leu Met Lys Gln Ser Thr Ser Glu
        115             120             125

Asp Ser Leu Asn Ala Thr Glu Arg Glu Gln Glu Glu Asn Ile Gln Thr
    130             135             140

Cys Thr Lys Ala Ile Ala Ser Leu Arg Ile Ala Thr Glu Glu Ala Ala
145             150             155             160

Leu Leu Gly Pro Asp Gln Pro Ala Arg Val Gln Glu Pro His Gln Asn
            165             170             175

Pro Leu Gly Ser Ala His Val Ser Ile Arg His Phe Ser Arg Pro Glu
            180             185             190

Pro Gly Gln Pro Cys Thr Ser Ala Thr His Pro Asp Leu His Asp Gly
            195             200             205

Glu Lys Asp Asn Phe Gly Thr Ser Gln Thr Pro Leu Ala His Ser Thr
    210             215             220

Phe Tyr Ser Lys Ser Cys Val Xaa Asp Lys Gln Leu Xaa Phe Ser Gln
225             230             235             240
```

```
Gln Gln Gly Asn Phe Leu Ser Ser Thr Xaa Gly Lys Gln Arg Ser Phe
            245             250                 255

Leu Gln Glu Lys Ser Xaa Ala Tyr Xaa Gly Leu Leu Xaa Gly Trp Gly
            260             265                 270

Asp Phe Pro Phe Pro Thr Phe Phe Pro Phe Phe Phe
            275             280
```

```
<210> 1323
<211> 278
<212> PRT
<213> Homo sapiens

<400> 1323
Ala Leu Lys Val Leu Cys Phe Phe Phe Pro Ile Leu Thr Gln His Tyr
  1             5               10                  15

Trp Cys Phe Leu Tyr Asp Phe Pro Leu Ile Leu Ser Asp Val Met Thr
            20              25                  30

Glu Ala His His Lys Tyr Asp His Ser Glu Ala Thr Gly Ser Ser Ser
        35              40                  45

Trp Asp Ile Gln Asn Ser Phe Arg Arg Glu Lys Leu Glu Gln Lys Ser
    50              55                  60

Pro Asp Ser Lys Thr Leu Gln Glu Asp Ser Pro Gly Val Arg Gln Arg
 65             70                  75                  80

Val Tyr Glu Cys Gln Glu Cys Gly Lys Ser Phe Arg Gln Lys Gly Ser
            85                  90                  95

Leu Thr Leu His Glu Arg Ile His Thr Gly Gln Lys Pro Phe Glu Cys
            100             105                 110

Thr His Cys Gly Lys Ser Phe Arg Ala Lys Gly Asn Leu Val Thr His
            115             120                 125

Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Gln Cys Lys Glu Cys Gly
            130             135                 140

Lys Ser Phe Ser Gln Arg Gly Ser Leu Ala Val His Glu Arg Leu His
145             150             155                 160

Thr Gly Gln Lys Pro Tyr Glu Cys Ala Ile Cys Gln Arg Ser Phe Arg
                165             170                 175
```

Asn Gln Ser Asn Leu Ala Val His Arg Arg Val His Ser Gly Glu Lys
            180   185   190

Pro Tyr Arg Cys Asp Gln Cys Gly Lys Ala Phe Ser Gln Lys Gly Ser
            195   200   205

Leu Ile Val His Ile Arg Val His Thr Gly Leu Lys Pro Tyr Ala Cys
            210   215   220

Thr Gln Cys Arg Lys Ser Phe His Thr Arg Gly Asn Cys Ile Leu His
225   230   235   240

Gly Lys Ile His Thr Gly Glu Thr Pro Tyr Leu Cys Gly Gln Cys Gly
            245   250   255

Lys Ser Phe Thr Gln Arg Gly Ser Leu Ala Val His Gln Arg Ser Cys
            260   265   270

Ser Gln Arg Leu Thr Leu
            275

<210> 1324
<211> 248
<212> PRT
<213> Homo sapiens

<400> 1324
Gly Thr Ser Trp Ser Arg Pro Phe Arg Gln Cys Phe Gln Thr Pro Trp
  1   5   10   15

Glu Arg Gly Cys Arg Val Arg Ser Ser Val Cys Thr Ala Arg Gly Arg
            20   25   30

Ala Gln Gln Arg Met Ser Gly Thr Leu Glu Lys Val Leu Cys Leu Arg
            35   40   45

Asn Asn Thr Ile Phe Lys Gln Ala Phe Ser Leu Leu Arg Phe Arg Thr
            50   55   60

Ser Gly Glu Lys Pro Ile Tyr Ser Val Gly Gly Ile Leu Leu Ser Ile
65   70   75   80

Ser Arg Pro Tyr Lys Thr Lys Pro Thr His Gly Ile Gly Lys Tyr Lys
            85   90   95

His Leu Ile Lys Ala Glu Glu Pro Lys Lys Lys Lys Gly Lys Val Glu
            100   105   110

Val Arg Ala Ile Asn Leu Gly Thr Asp Tyr Glu Tyr Gly Val Leu Asn

```
              115                 120                 125

  Ile His Leu Thr Ala Tyr Asp Met Thr Leu Ala Glu Ser Tyr Ala Gln
      130               135               140

  Tyr Val His Asn Leu Cys Asn Ser Leu Ser Ile Lys Val Glu Glu Ser
  145               150               155               160

  Tyr Ala Met Pro Thr Lys Thr Ile Glu Val Leu Gln Leu Gln Asp Gln
                165               170               175

  Gly Ser Lys Met Leu Leu Asp Ser Val Leu Thr Thr His Glu Arg Val
              180               185               190

  Val Gln Ile Ser Gly Leu Ser Ala Thr Phe Ala Glu Ile Phe Leu Glu
              195               200               205

  Ile Ile Gln Ser Ser Leu Pro Glu Gly Val Arg Leu Ser Val Lys Glu
      210               215               220

  His Thr Glu Glu Asp Phe Lys Gly Arg Phe Lys Ala Arg Pro Glu Leu
  225               230               235               240

  Glu Glu Leu Leu Ala Lys Leu Lys
                245
```

<210> 1325
<211> 139
<212> PRT
<213> Homo sapiens

<400> 1325
```
  Pro Gly Ser Thr His Ala Ser Ala His Ala Ser Ala Arg Pro Thr Arg
    1               5               10              15

  Lys Met Ala Pro Gln Lys Asp Arg Lys Pro Lys Arg Ser Thr Trp Arg
              20              25              30

  Phe Asn Leu Asp Leu Thr His Pro Val Glu Asp Gly Ile Phe Asp Ser
              35              40              45

  Gly Asn Phe Glu Gln Phe Leu Arg Glu Lys Val Lys Val Asn Gly Lys
      50              55              60

  Thr Gly Asn Leu Gly Asn Val Val His Ile Glu Arg Phe Lys Asn Lys
  65              70              75              80

  Ile Thr Val Val Ser Glu Lys Gln Phe Ser Lys Arg Tyr Leu Lys Tyr
              85              90              95
```

```
Leu Thr Lys Lys Tyr Leu Lys Lys Asn Asn Leu Arg Asp Trp Leu Arg
            100                 105             110

Val Val Ala Ser Asp Lys Glu Thr Tyr Glu Leu Arg Tyr Phe Gln Ile
            115                 120             125

Ser Gln Asp Glu Asp Glu Ser Glu Ser Glu Asp
        130             135
```

```
<210> 1326
<211> 356
<212> PRT
<213> Homo sapiens

<400> 1326
Ile Pro Thr Arg Pro Arg Thr Arg Gly Ser Leu Gly Ser Ala Val Lys
  1           5               10                  15

Leu Arg Thr Phe Ala Glu Asn Tyr Pro Ile Pro Glu Pro Gly Pro Asn
            20                  25              30

Glu Val Leu Leu Arg Met His Ser Val Gly Ile Cys Gly Ser Asp Val
            35                  40                  45

His Tyr Trp Glu Tyr Gly Arg Ile Gly Asn Phe Ile Val Lys Lys Pro
        50                  55                  60

Met Val Leu Gly His Glu Ala Ser Gly Thr Val Glu Lys Val Gly Ser
 65                  70                  75                  80

Ser Val Lys His Leu Lys Pro Gly Asp Arg Val Ala Ile Glu Pro Gly
                85                  90                  95

Ala Pro Arg Glu Asn Asp Glu Phe Cys Lys Met Gly Arg Tyr Asn Leu
            100                 105             110

Ser Pro Ser Ile Phe Phe Cys Ala Thr Pro Pro Asp Asp Gly Asn Leu
            115                 120             125

Cys Arg Phe Tyr Lys His Asn Ala Ala Phe Cys Tyr Lys Leu Pro Asp
        130                 135             140

Asn Val Thr Phe Glu Glu Gly Ala Leu Ile Glu Pro Leu Ser Val Gly
145                 150                 155             160

Ile His Ala Cys Arg Arg Gly Gly Val Thr Leu Gly His Lys Val Leu
                165                 170             175
```

Val Cys Gly Ala Gly Pro Ile Gly Met Val Thr Leu Leu Val Ala Lys
          180   185   190

Ala Met Gly Ala Ala Gln Val Val Val Thr Asp Leu Ser Ala Thr Arg
          195   200   205

Leu Ser Lys Ala Lys Glu Ile Gly Ala Asp Leu Val Leu Gln Ile Ser
          210   215   220

Lys Glu Ser Pro Gln Glu Ile Ala Arg Lys Val Glu Gly Gln Leu Gly
225   230   235   240

Cys Lys Pro Glu Val Thr Ile Glu Cys Thr Gly Ala Glu Ala Ser Ile
                  245   250   255

Gln Ala Gly Ile Tyr Ala Thr Arg Ser Gly Gly Thr Leu Val Leu Val
          260   265   270

Gly Leu Gly Ser Glu Met Thr Thr Val Pro Leu Leu His Ala Ala Ile
          275   280   285

Arg Glu Val Asp Ile Lys Gly Val Phe Arg Tyr Cys Asn Thr Trp Pro
290   295   300

Val Ala Ile Ser Met Leu Ala Ser Lys Ser Val Asn Val Lys Pro Leu
305   310   315   320

Val Thr His Arg Phe Pro Leu Glu Lys Ala Leu Glu Ala Phe Glu Thr
                  325   330   335

Phe Lys Lys Gly Leu Gly Leu Lys Ile Met Leu Lys Cys Asp Pro Ser
                  340   345   350

Asp Gln Asn Pro
          355

<210> 1327
<211> 107
<212> PRT
<213> Homo sapiens

<400> 1327
Met Asp Ala Ile Leu Asn Tyr Arg Ser Glu Asp Thr Glu Asp Tyr Tyr
1   5   10   15

Thr Leu Leu Gly Cys Asp Glu Leu Ser Ser Val Glu Gln Ile Leu Ala
                  20   25   30

Glu Phe Lys Val Arg Ala Leu Glu Cys His Pro Asp Lys His Pro Glu

```
                35                      40                         45

     Asn Pro Lys Ala Val Glu Thr Phe Gln Lys Leu Gln Lys Ala Lys Glu
            50                      55                  60

     Ile Leu Thr Asn Glu Glu Ser Arg Ala Arg Tyr Asp His Trp Arg Arg
     65                      70                  75                  80

     Ser Gln Met Ser Met Pro Phe Gln Gln Trp Glu Ala Leu Asn Asp Ser
                    85                      90                  95

     Val Lys Thr Val Gly Phe Ser Leu Gly Ala Thr
                    100                     105
```

<210> 1328
<211> 110
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1328
```
     Xaa Val Ser Leu Ala Ala Leu Lys Lys Ala Leu Ala Ala Ala Gly Tyr
     1                   5                   10                  15

     Asp Val Glu Lys Asn Asn Ser Arg Ile Lys Leu Gly Leu Lys Ser Leu
                    20                      25                  30

     Val Ser Lys Gly Thr Leu Val Gln Thr Lys Gly Thr Gly Ala Ser Gly
                    35                      40                  45

     Ser Phe Lys Leu Asn Lys Lys Ala Ala Ser Gly Glu Ala Lys Pro Lys
            50                      55                  60

     Val Lys Lys Ala Gly Gly Thr Lys Pro Lys Lys Pro Val Gly Ala Ala
     65                      70                  75                  80

     Lys Lys Pro Lys Lys Ala Ala Gly Gly Ala Thr Pro Lys Lys Ser Ala
                    85                      90                  95

     Lys Lys Thr Pro Lys Lys Ala Lys Lys Pro Pro Arg Pro Leu
                    100                     105                 110
```

<210> 1329

<211> 292
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (145)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (207)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1329

```
Leu Gly Leu Ile Cys Gln Ala Leu Trp Phe Pro Ser Tyr Phe Arg Gly
 1               5                  10                  15

Cys Tyr Gly Xaa Leu Gly Gly Arg Pro His Met Gly Arg Gly Trp Val
             20              25              30

Val Asp Gly Val Ser Val Val Ser Cys Gly Arg Val Ile Leu Leu Leu
         35              40              45

Phe Leu Phe Thr Phe Phe Pro Leu His Lys Pro Lys Ser Phe His Leu
     50              55              60

Val Ser Thr Val Trp Thr Val Leu Glu Leu Gly Ala Cys Gln Lys Asn
65              70              75              80

Leu Gly Leu Gly Lys Pro Gln Val Ala Asp Met Val Lys Gln Arg Asn
             85              90              95

Cys Ser Ser Gly Ser Cys Thr Thr Ser Glu Gly Gln Lys Pro Ser Pro
             100             105             110

Gly Arg Arg Arg Val Phe Arg Ser Gln Thr Phe Gly Glu Lys Ala Ala
         115             120             125

Pro Ser Leu Leu Gly Asp Arg His Ser Ala Cys Val Pro Gln Leu Gly
     130             135             140

Xaa Ala Gly Ser Leu Thr Tyr Glu Ala Trp Arg Ser Ser His Cys Pro
145             150             155             160

His Tyr Gly Gln Arg Gly Asp Pro Ala Gly Pro Leu Gly Gln Thr Gly
```

```
              165                    170                    175
Ala Asn Thr Ala Ser His Pro Leu Trp Leu Leu Ala Met Pro Gln Val
            180                185                190

Pro Lys Lys Met Glu Asp Pro Cys Ala Arg Ser Gln Pro Gly Xaa Pro
        195                200                205

Glu Gly Gln Cys Pro Ser Glu Asp Arg Ser Glu Arg Ile Lys Phe Pro
    210                215                220

Val Gly Pro Leu Ser Pro Leu Gly Cys Val Phe Gln Leu Leu Thr Phe
225                230                235                240

Gln Arg Gly Pro Ser Arg Ser Pro Ala Gly Phe Pro Gln Gly Leu Pro
            245                250                255

Leu Arg Trp Glu Trp Ile Ser Thr Arg Ala Phe Asp Phe Gly Gln Ile
            260                265                270

Gly Pro His Ser His Arg Phe Ser Cys Gln Gly Pro Trp Thr Gly Gly
        275                280                285

Trp Cys Phe Leu
    290
```

```
<210> 1330
<211> 130
<212> PRT
<213> Homo sapiens

<400> 1330
Arg Arg Arg Trp Leu Ala Arg Leu Gly Glu Gly Val Ser Lys Met Met
  1           5                10                15

Leu Gln His Pro Gly Gln Val Ser Ala Ser Glu Val Ser Ala Ser Ala
            20                25                30

Ile Val Pro Cys Leu Ser Pro Pro Gly Ser Leu Val Phe Glu Asp Phe
            35                40                45

Ala Asn Leu Thr Pro Phe Val Lys Glu Glu Leu Arg Phe Ala Ile Gln
    50                55                60

Asn Lys His Leu Cys His Arg Met Ser Ser Ala Leu Glu Ser Val Thr
65                70                75                80

Val Ser Asp Arg Pro Leu Gly Val Ser Ile Thr Lys Ala Glu Val Ala
            85                90                95
```

```
Pro Glu Glu Asp Glu Arg Lys Lys Arg Arg Arg Glu Arg Asn Lys Ile
            100             105             110

Ala Ala Ala Lys Cys Arg Asn Lys Lys Lys Glu Lys Thr Asp Ala Cys
            115             120             125

Arg Lys
    130
```

```
<210> 1331
<211> 232
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (168)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (186)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (187)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (199)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (202)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (209)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1331
Gly Lys Leu Val Arg Leu Gln Val Pro Val Arg Asn Ser Arg Val Asp
    1               5               10              15
```

```
Pro Arg Val Arg Ala Glu Asn Arg Ser Trp Lys Cys Leu Leu Ala Ala
            20              25              30

Arg Gly Glu Glu Arg Gly Ala Ser Ile Met Ala Glu Gln Asp Val Glu
            35              40              45

Asn Asp Leu Leu Asp Tyr Asp Glu Glu Glu Glu Pro Gln Ala Pro Gln
        50              55              60

Glu Ser Thr Pro Ala Pro Pro Lys Lys Asp Ile Lys Gly Ser Tyr Val
65              70              75              80

Ser Ile His Ser Ser Gly Phe Arg Asp Phe Leu Leu Lys Pro Glu Leu
                85              90              95

Leu Arg Ala Ile Val Asp Cys Gly Phe Glu His Pro Ser Glu Val Gln
            100             105             110

His Glu Cys Ile Pro Gln Ala Ile Leu Gly Met Asp Val Leu Cys Gln
            115             120             125

Ala Lys Ser Gly Met Gly Lys Thr Ala Val Phe Val Leu Ala Thr Leu
            130             135             140

Gln Gln Ile Glu Pro Val Asn Gly Gln Val Thr Val Leu Val Met Cys
145             150             155             160

His Thr Arg Glu Leu Ala Phe Xaa Ile Ser Lys Glu Tyr Glu Arg Phe
                165             170             175

Ser Lys Tyr Met Pro Ser Val Lys Val Xaa Xaa Ser Ala Arg Leu Asp
            180             185             190

Gln Ala Pro Leu Gly Phe Xaa Ser Phe Xaa Ser Leu Gly Ser Gly Pro
            195             200             205

Xaa Ser Ile Tyr Gln Ala Trp Gln Gly Gln Leu Pro Leu Lys Val Cys
210             215             220

Ser Gly Phe Cys Ser Leu Lys Ala
225             230
```

```
<210> 1332
<211> 63
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
```

<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1332

Gly His Gly Glu Gln Arg Xaa His Gly Arg Glu Val Asn Ala Leu Lys
1   5   10   15

Ser Lys Leu Arg Arg Gly Asn Glu Thr Ser Phe Val Pro Ser Arg Arg
            20   25   30

Ser Gly Gly Arg Arg Val Ile Glu Asn Ala Asp Gly Ser Glu Glu Glu
        35   40   45

Thr Asp Thr Arg Asp Ala Asp Phe Asn Gly Thr Lys Ala Ser Glu
    50   55   60

<210> 1333
<211> 175
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1333

Ala Ile Ser Val Leu Ala Ser Pro Leu Thr Ser Leu Leu Ser Cys Gly
1   5   10   15

Asp Arg Met Asp Arg Phe Leu Val Lys Gly Ala Gln Gly Gly Leu Leu
            20   25   30

Arg Lys Gln Glu Glu Gln Glu Pro Thr Gly Glu Glu Pro Ala Val Leu
        35   40   45

Gly Gly Asp Lys Glu Ser Thr Arg Lys Arg Xaa Arg Arg Glu Ala Pro
    50   55   60

Gly Asn Gly Gly His Ser Ala Gly Pro Ser Trp Arg His Ile Arg Ala
65   70   75   80

Glu Gly Leu Asp Cys Ser Tyr Thr Val Leu Phe Gly Lys Ala Glu Ala
                85   90   95

Asp Glu Ile Phe Gln Glu Leu Glu Lys Glu Val Glu Tyr Phe Thr Gly
            100   105   110

Ile Lys Met Ala Val Thr Thr Ser Gly Ser Thr Glu Met Met Lys Glu

```
             115                    120                    125

Asn Trp Pro Leu Gly Ala Pro Leu Pro Leu Ser Pro Ser Val Pro Ala
    130                    135                    140

Glu Thr Leu Ser Ser Gly Ile Arg Ile Pro Val Gly Lys Ala Pro Pro
145                    150                    155                    160

Gly Gly Trp Arg Trp Ser Gly Cys Arg Trp Pro Thr Gly Ala Tyr
                165                    170                    175



<210> 1334
<211> 63
<212> PRT
<213> Homo sapiens

<400> 1334
Ser Ser Phe Leu Leu Val Gln Phe Asp Gly Val Asn Gly Glu Phe Gln
 1               5                   10                   15

Ala Gln Leu Leu Asn Phe Val Ala Ser Ser Ser Ser Pro Ser His Leu
            20                   25                   30

Gln Ser Ser Ala Pro Leu Cys Leu Gly Asp Arg Gln Glu Val Gly Glu
            35                   40                   45

Glu Leu Asn Leu Phe Ile Phe Pro Gly Arg Asp Ile Phe Lys Ala
    50                   55                   60



<210> 1335
<211> 95
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1335
Leu Leu Leu Phe Leu Ile Met Phe Ser Ala Glu Arg His Gly Leu Lys
 1               5                   10                   15

Glu Pro Lys Arg Val Glu Glu Leu Gln Asn Lys Ile Val Asn Cys Leu
            20                   25                   30

Lys Asp His Val Thr Phe Asn Asn Gly Gly Leu Asn Arg Pro Asn Tyr
```

```
                35                    40                        45
   Leu Xaa Lys Leu Leu Gly Lys Leu Pro Glu Leu Arg Thr Leu Cys Thr
        50                    55                    60

   Gln Gly Leu Gln Arg Ile Phe Tyr Leu Lys Leu Glu Asp Leu Val Pro
   65                    70                    75                    80

   Pro Pro Ala Ile Ile Asp Lys Leu Phe Leu Asp Thr Leu Pro Phe
                     85                    90                    95



<210> 1336
<211> 84
<212> PRT
<213> Homo sapiens

<400> 1336
Asp Arg Arg Arg Lys Trp Arg Gly Gly Ile Leu Glu Leu Leu Arg
 1                5                    10                    15

Met Gly Gly Val Pro Ser Ala Glu Ala Lys Gly Gly Glu Gln Pro Ser
                20                    25                    30

Trp Ser Trp Arg Asp Gly Glu Gly Phe Gln Leu Ile Cys Arg Ser Cys
             35                    40                    45

Pro Cys Gly Pro Gln Pro Ser Gly Leu Ala Val Asp Val Pro Leu Pro
        50                    55                    60

Thr His Leu Pro Ala Cys Pro Pro Ala Arg Ile Ala Leu Ala Asp Leu
65                    70                    75                    80

Pro Glu Arg Thr



<210> 1337
<211> 146
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (75)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1337
Ala Gly Leu Arg Lys Arg Gly Arg Ser Gly Ser Ala Ala Gln Ala Glu
```

```
      1                   5                        10                         15

    Gly Leu Cys Lys Gln Trp Leu Gln Arg Ala Trp Gln Glu Arg Arg Leu
                20                  25                  30

    Leu Leu Arg Glu Pro Arg Tyr Thr Leu Leu Val Ala Ala Cys Leu Cys
                35                  40                  45

    Leu Ala Glu Val Gly Ile Thr Phe Trp Val Ile His Arg Val Ala Tyr
            50                  55                  60

    Thr Glu Ile Asp Trp Lys Ala Tyr Met Ala Xaa Val Glu Gly Val Ile
    65                  70                  75                      80

    Asn Gly Thr Tyr Asp Tyr Thr Gln Leu Gln Gly Asp Thr Gly Pro Leu
                    85                  90                  95

    Val Tyr Pro Ala Gly Phe Val Tyr Ile Phe Met Gly Leu Tyr Tyr Ala
                100                 105                 110

    Thr Ser Arg Gly Thr Asp Ile Arg Met Ala Gln Asn Ile Phe Ala Val
                115                 120                 125

    Leu Tyr Leu Ala Thr Leu Leu Leu Val Phe Leu Ile Tyr His Gln Thr
        130                 135                 140

    Cys Lys
    145
```

<210> 1338
<211> 187
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (177)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (185)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (187)
<223> Xaa equals any of the naturally occurring L-amino acids

```
<400> 1338
Leu Thr Leu Leu Phe Pro Glu Pro Pro Ala Gln Ala Gly Met Phe Val
 1               5                  10                  15

Leu Val Glu Met Val Asp Thr Val Arg Ile Pro Pro Trp Gln Phe Glu
                20                  25                  30

Arg Lys Leu Asn Asp Ser Ile Ala Glu Glu Leu Asn Lys Lys Leu Ala
            35                  40                  45

Asn Lys Val Val Tyr Asn Val Gly Leu Cys Ile Cys Leu Phe Asp Ile
        50                  55                  60

Thr Lys Leu Glu Asp Ala Tyr Val Phe Pro Gly Asp Gly Ala Ser His
 65                  70                  75                  80

Thr Lys Val His Phe Arg Cys Val Val Phe His Pro Phe Leu Asp Glu
                85                  90                  95

Ile Leu Ile Gly Lys Ile Lys Gly Cys Ser Pro Glu Gly Val His Val
            100                 105                 110

Ser Leu Gly Phe Phe Asp Asp Ile Leu Ile Pro Pro Glu Ser Leu Gln
            115                 120                 125

Gln Pro Ala Lys Phe Asp Glu Ala Glu Gln Val Trp Val Trp Glu Tyr
        130                 135                 140

Glu Thr Glu Glu Gly Ala His Asp Leu Tyr Met Asp Thr Gly Glu Glu
145                 150                 155                 160

Ile Arg Phe Arg Val Val Asp Glu Ser Phe Val Asp Thr Ser Pro Thr
                165                 170                 175

Xaa Pro Ser Ser Ala Asp Ala Thr Xaa Phe Xaa
                180                 185
```

```
<210> 1339
<211> 43
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1339
Gly Gln Thr Phe Thr Ser Gly Asn Leu Leu Ser His Val Phe His Phe
```

```
              1                 5                      10                      15
        Tyr Ala His Arg Ile Ile Trp Cys Asn Gly Ala Tyr Xaa Pro Lys Phe
                       20                    25                    30

        Gln Asn Phe Lys Phe Met Tyr Leu Phe Leu His
                       35                    40
```

```
<210> 1340
<211> 104
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (100)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1340
Xaa Pro Ala Pro Gln Gln Pro Gly Pro Gln Arg Cys Glu Glu Pro Leu
  1               5                  10                      15

His Arg Asp Leu Pro Gly Gly Ala Asp Gln Ser Gly Arg Arg Xaa Ser
                20                    25                    30

Leu Arg Gln Thr Arg Thr Trp Lys Phe Ile Asp Pro Phe Cys Arg Ile
                35                    40                    45

Ala Ala Arg Thr Lys Asp Ser Leu Val Leu Asn Asn Ile Thr Arg Gly
      50                    55                    60

Ile Phe Glu Thr Ile Val Glu Gln Ala Pro Leu Ala Ile Glu Asp Leu
  65                    70                    75                    80

Leu Asn Glu Leu Asp Thr Gln Asp Glu Glu Val Ala Ser Asp Ser Asp
                      85                    90                    95

Glu Ser Ser Xaa Gly Gly Glu Arg
                      100
```

```
<210> 1341
<211> 169
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (126)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1341
Gly Ser Thr Pro Arg Gly Lys Met Arg Ala Pro Ile Pro Glu Pro Lys
 1               5                  10                  15

Pro Gly Asp Leu Ile Glu Ile Phe Arg Pro Phe Tyr Arg His Trp Ala
                20              25              30

Ile Tyr Val Gly Asp Gly Tyr Val Val His Leu Ala Pro Pro Ser Glu
            35              40              45

Val Ala Gly Ala Gly Ala Ala Ser Val Met Ser Ala Leu Thr Asp Lys
        50              55              60

Ala Ile Val Lys Lys Glu Leu Leu Tyr Asp Val Ala Gly Ser Asp Lys
65              70              75              80

Tyr Gln Val Asn Asn Lys His Asp Asp Lys Tyr Ser Pro Leu Pro Cys
                85                  90                  95

Ser Lys Ile Ile Gln Arg Ala Glu Glu Leu Val Gly Gln Glu Val Leu
            100             105             110

Tyr Lys Leu Thr Ser Glu Asn Cys Glu His Phe Val Asn Xaa Leu Arg
        115                 120                 125

Tyr Gly Val Ala Arg Ser Asp Gln Val Arg Asp Val Ile Ile Ala Ala
        130             135             140

Ser Val Ala Gly Met Gly Leu Ala Ala Met Ser Leu Ile Gly Val Met
145             150             155             160

Phe Ser Arg Asn Lys Arg Gln Lys Gln
                165

<210> 1342
<211> 115
```

```
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (102)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (114)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1342
Phe Pro Asn Pro Xaa Xaa Arg Gly Val Trp Ala Arg Gly Pro Pro Gly
 1               5                   10                  15

Leu Ser Phe Lys Gly Lys Thr Leu Xaa Gly Phe Gly Glu Ile Pro Pro
                20                  25                  30

Pro Pro Gly Gly Ala Leu Cys Pro Lys Gly Lys Asn Phe Pro Gly Ala
                35                  40                  45

Xaa Pro Glu Arg Pro Gln Lys Arg Phe Pro Pro Gly Lys Glu Ser Pro
        50                  55                  60

Val Gly Ile Val Lys Thr Lys Arg Gly Ile Leu Lys Ala Gly Asn Ser
65                  70                  75                  80

Gly Cys Pro Pro Thr Ser Pro Asn Ile Pro Gly Gly Thr Trp Gly Leu
                85                  90                  95
```

```
Glu Arg Cys Leu Gly Xaa Leu Arg Gln Ala Ser Gln Gly Trp Leu Val
            100                 105                 110

Ser Xaa Arg
        115
```

```
<210> 1343
<211> 342
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1343
Xaa Leu His Arg Gly Asp Asp Arg Ser Arg Thr Ser Gly Ser Pro Gly
 1           5                  10                 15

Leu Gln Glu Phe Gly Arg Gly Xaa Ala Gly Val Gly Gly Arg Pro Arg
            20                 25                 30

Arg Arg Arg Arg Lys Gly Ala Ala Ser Arg Ala Arg Leu Pro Phe Ser
         35                 40                 45

Leu Ser Ile Met Asp Pro Ser Leu Leu Arg Glu Arg Glu Leu Phe Lys
     50                 55                 60

Lys Arg Ala Leu Ser Thr Pro Val Val Glu Lys Arg Ser Ala Ser Ser
 65                 70                 75                 80

Glu Ser Ser Ser Ser Ser Ser Lys Lys Lys Lys Thr Lys Val Glu His
                 85                 90                 95

Gly Gly Ser Ser Gly Ser Lys Gln Asn Ser Asp His Ser Asn Gly Ser
            100                 105                 110

Phe Asn Leu Lys Ala Leu Ser Gly Ser Ser Gly Tyr Lys Phe Gly Val
        115                 120                 125

Leu Ala Lys Ile Val Asn Tyr Met Lys Thr Arg His Gln Arg Gly Asp
    130                 135                 140
```

```
Thr His Pro Leu Thr Leu Asp Glu Ile Leu Asp Glu Thr Gln His Leu
145                 150             155             160

Asp Ile Gly Leu Lys Gln Lys Gln Trp Leu Met Thr Glu Ala Leu Val
                165             170             175

Asn Asn Pro Lys Ile Glu Val Ile Asp Gly Lys Tyr Ala Phe Lys Pro
            180             185             190

Lys Tyr Asn Val Arg Asp Lys Lys Ala Leu Leu Arg Leu Leu Asp Gln
            195             200             205

His Asp Gln Arg Gly Leu Gly Gly Ile Leu Leu Glu Asp Ile Glu Glu
        210             215             220

Ala Leu Pro Asn Ser Gln Lys Ala Val Lys Ala Leu Gly Asp Gln Ile
225             230             235             240

Leu Phe Val Asn Arg Pro Asp Lys Lys Lys Ile Leu Phe Phe Asn Asp
            245             250             255

Lys Ser Cys Gln Phe Ser Val Asp Glu Glu Phe Gln Lys Leu Trp Arg
            260             265             270

Ser Val Thr Val Asp Ser Met Asp Glu Glu Lys Ile Glu Glu Tyr Leu
            275             280             285

Lys Arg Gln Gly Ile Ser Ser Met Gln Glu Ser Gly Pro Lys Lys Val
            290             295             300

Ala Pro Ile Gln Arg Arg Lys Lys Pro Ala Ser Gln Lys Lys Arg Arg
305             310             315             320

Phe Lys Thr His Asn Glu His Leu Ala Gly Val Leu Lys Asp Tyr Ser
            325             330             335

Asp Ile Thr Ser Ser Lys
            340
```

```
<210> 1344
<211> 310
<212> PRT
<213> Homo sapiens

<400> 1344
Cys Gly Arg Arg Ser Ser Leu His Leu Leu Leu Gly Pro Pro Ser Leu
    1           5               10              15
```

Pro Ser Ser His Phe Pro Ser Ser Gly Val Val Pro Ala Thr Leu Asp
            20   25   30

Ala Ala Ala Gly Thr Lys Glu Asp Pro Ala Ala Ala Arg Arg His Leu
        35   40   45

Arg Leu Leu Leu Arg Pro Ala Pro Gly Pro Arg Arg Arg His Gln Gly
    50   55   60

Ala Arg Leu Ser Leu Pro Gly Gly Leu Gly Pro Ala Ser Ser Cys Arg
65   70   75   80

Leu Arg Ala Arg Thr Arg Leu Ser His Leu Gly Pro Cys Arg Gln Lys
            85   90   95

Asn Met Ala Gln Glu Thr Asn Gln Thr Pro Gly Pro Met Leu Cys Ser
            100   105   110

Thr Gly Cys Gly Phe Tyr Gly Asn Pro Arg Thr Asn Gly Met Cys Ser
        115   120   125

Val Cys Tyr Lys Glu His Leu Gln Arg Gln Asn Ser Gly Arg Met
        130   135   140

Ser Pro Met Gly Thr Ala Ser Gly Ser Asn Ser Pro Thr Ser Asp Ser
145   150   155   160

Ala Ser Val Gln Arg Ala Asp Thr Ser Leu Asn Asn Cys Glu Gly Ala
            165   170   175

Ala Gly Ser Thr Ser Glu Lys Ser Arg Asn Val Pro Val Ala Ala Leu
            180   185   190

Pro Val Thr Gln Gln Met Thr Glu Met Ser Ile Ser Arg Glu Asp Lys
    195   200   205

Ile Thr Thr Pro Lys Thr Glu Val Ser Glu Pro Val Val Thr Gln Pro
    210   215   220

Ser Pro Ser Val Ser Gln Pro Ser Thr Ser Gln Ser Glu Glu Lys Ala
225   230   235   240

Pro Glu Leu Pro Lys Pro Lys Lys Asn Arg Cys Phe Met Cys Arg Lys
            245   250   255

Lys Val Gly Leu Thr Gly Phe Asp Cys Arg Cys Gly Asn Leu Phe Cys
            260   265   270

Gly Leu His Arg Tyr Ser Asp Lys His Asn Cys Pro Tyr Asp Tyr Lys
        275   280   285

```
Ala Glu Ala Ala Ala Lys Ile Arg Lys Glu Asn Pro Val Val Val Ala
    290                 295             300

Glu Lys Ile Gln Arg Ile
305                 310




<210> 1345
<211> 202
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (182)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1345
Arg Arg Ala Arg Ala His Pro Gly Xaa Arg Leu Trp Gly Arg Arg Arg
  1             5                 10                 15

Gly Pro Glu Pro Ser Thr Val Gly Arg Lys Ala Thr Lys Lys Thr Asp
              20                 25                 30

Lys Pro Arg Gln Glu Asp Lys Asp Asp Leu Asp Val Thr Glu Leu Thr
          35                 40                 45

Asn Glu Asp Leu Leu Asp Gln Leu Val Lys Tyr Gly Val Asn Pro Gly
    50                 55                 60

Pro Ile Val Gly Thr Thr Arg Lys Leu Tyr Glu Lys Lys Leu Leu Lys
 65                 70                 75                 80

Leu Arg Glu Gln Gly Thr Glu Ser Arg Ser Ser Thr Pro Leu Pro Thr
              85                 90                 95

Ile Ser Ser Ser Ala Glu Asn Thr Arg Gln Asn Gly Ser Asn Asp Ser
              100                105                110

Asp Arg Tyr Ser Asp Asn Glu Glu Gly Lys Lys Lys Glu His Lys Lys
          115                120                125

Val Lys Ser Thr Arg Asp Ile Val Pro Phe Ser Glu Leu Gly Asn Tyr
    130                135                140
```

```
Ser Leu Trp Trp Trp Asp Phe Phe Arg Val Phe Leu Phe Leu Lys Ser
145                     150                 155                 160

Pro Pro Val Leu Leu Trp Ala Val Pro Asn Tyr Arg Gln Leu Arg Lys
                    165             170                 175

Tyr Ile Leu Leu Arg Xaa Thr Tyr Leu Gly Ser Leu Leu Leu Pro Gln
                180             185             190

Thr Cys Leu Ala Gly Asp Ser Cys Arg Ser
        195             200
```

```
<210> 1346
<211> 223
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (137)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1346
Val Ile Asp His Pro Arg Pro Arg Asp Thr Gln Phe Ile Val Ile Ile
  1             5                 10                  15

Met Asn Asn Gln Lys Val Val Ala Val Leu Leu Gln Glu Cys Lys Gln
                20              25              30

Val Leu Xaa Gln Leu Leu Leu Glu Ala Pro Asp Val Ser Glu Glu Asp
        35              40              45

Lys Ser Glu Asp Gln Arg Cys Arg Ala Leu Leu Pro Ser Glu Leu Arg
    50              55              60

Thr Leu Ile Gln Glu Ala Lys Glu Met Lys Trp Pro Phe Val Pro Glu
65              70              75                  80

Lys Trp Gln Tyr Lys Gln Ala Val Gly Pro Glu Asp Lys Thr Asn Leu
                85              90                  95

Lys Asp Val Ile Gly Ala Gly Leu Gln Gln Leu Leu Ala Ser Leu Arg
                100             105             110
```

```
Ala Ser Ile Leu Ala Arg Asp Cys Ala Ala Ala Ala Ala Ile Val Phe
        115             120             125

Leu Val Asp Arg Phe Leu Tyr Gly Xaa Asp Val Ser Gly Lys Leu Leu
    130             135             140

Gln Val Ala Lys Gly Leu His Lys Leu Gln Pro Ala Thr Pro Ile Ala
145             150             155             160

Pro Gln Val Val Ile Arg Gln Ala Arg Ile Ser Val Asn Ser Gly Lys
                165             170             175

Leu Leu Lys Ala Glu Tyr Ile Leu Ser Ser Leu Ile Ser Asn Asn Gly
            180             185             190

Ala Thr Gly Thr Trp Leu Tyr Arg Asn Glu Ser Asp Lys Val Leu Val
        195             200             205

Gln Ser Val Cys Ile Gln Ile Arg Gly Gln Ile Leu Gln Lys Leu
    210             215             220


<210> 1347
<211> 744
<212> PRT
<213> Homo sapiens

<400> 1347
Leu Asp Arg Thr Ile Lys Val Trp Gln Leu Gly Ser Ser Ser Pro Asn
  1           5               10              15

Phe Thr Leu Glu Gly His Glu Lys Gly Val Asn Cys Ile Asp Tyr Tyr
            20              25              30

Ser Gly Gly Asp Lys Pro Tyr Leu Ile Ser Gly Ala Asp Asp Arg Leu
            35              40              45

Val Lys Ile Trp Asp Tyr Gln Asn Lys Thr Cys Val Gln Thr Leu Glu
    50              55              60

Gly His Ala Gln Asn Val Ser Cys Ala Ser Phe His Pro Glu Leu Pro
65              70              75              80

Ile Ile Ile Thr Gly Ser Glu Asp Gly Thr Val Arg Ile Trp His Ser
            85              90              95

Ser Thr Tyr Arg Leu Glu Ser Thr Leu Asn Tyr Gly Met Glu Arg Val
            100             105             110

Trp Cys Val Ala Ser Leu Arg Gly Ser Asn Asn Val Ala Leu Gly Tyr
```

```
              115                    120                    125

    Asp Glu Gly Ser Ile Ile Val Lys Leu Gly Arg Glu Glu Pro Ala Met
        130                 135                 140

    Ser Met Asp Ala Asn Gly Lys Ile Ile Trp Ala Lys His Ser Glu Val
    145                 150                 155                 160

    Gln Gln Ala Asn Leu Lys Ala Met Gly Asp Ala Glu Ile Lys Asp Gly
                    165                 170                 175

    Glu Arg Leu Pro Leu Ala Val Lys Asp Met Gly Ser Cys Glu Ile Tyr
                180                 185                 190

    Pro Gln Thr Ile Gln His Asn Pro Asn Gly Arg Phe Val Val Val Cys
                195                 200                 205

    Gly Asp Gly Glu Tyr Ile Ile Tyr Thr Ala Met Ala Leu Arg Asn Lys
        210                 215                 220

    Ser Phe Gly Ser Ala Gln Glu Phe Ala Trp Ala His Asp Ser Ser Glu
    225                 230                 235                 240

    Tyr Ala Ile Arg Glu Ser Asn Ser Ile Val Lys Ile Phe Lys Asn Phe
                    245                 250                 255

    Lys Glu Lys Lys Ser Phe Lys Pro Asp Phe Gly Ala Glu Ser Ile Tyr
                260                 265                 270

    Gly Gly Phe Leu Leu Gly Val Arg Ser Val Asn Gly Leu Ala Phe Tyr
                275                 280                 285

    Asp Trp Asp Asn Thr Glu Leu Ile Arg Arg Ile Glu Ile Gln Pro Lys
        290                 295                 300

    His Ile Phe Trp Ser Asp Ser Gly Glu Leu Val Cys Ile Ala Thr Glu
    305                 310                 315                 320

    Glu Ser Phe Phe Ile Leu Lys Tyr Leu Ser Glu Lys Val Leu Ala Ala
                    325                 330                 335

    Gln Glu Thr His Glu Gly Val Thr Glu Asp Gly Ile Glu Asp Ala Phe
                340                 345                 350

    Glu Val Leu Gly Glu Ile Gln Glu Ile Val Lys Thr Gly Leu Trp Val
                355                 360                 365

    Gly Asp Cys Phe Ile Tyr Thr Ser Ser Val Asn Arg Leu Asn Tyr Tyr
        370                 375                 380

    Val Gly Gly Glu Ile Val Thr Ile Ala His Leu Asp Arg Thr Met Tyr
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       385                    390                    395                    400

       Leu Leu Gly Tyr Ile Pro Lys Asp Asn Arg Leu Tyr Leu Gly Asp Lys
                       405             410             415

       Glu Leu Asn Ile Ile Ser Tyr Ser Leu Leu Val Ser Val Leu Glu Tyr
                       420             425             430

       Gln Thr Ala Val Met Arg Arg Asp Phe Ser Met Ala Asp Lys Val Leu
                   435             440             445

       Pro Thr Ile Pro Lys Glu Gln Arg Thr Arg Val Ala His Phe Leu Glu
           450             455             460

       Lys Gln Gly Phe Lys Gln Gln Ala Leu Thr Val Ser Thr Asp Pro Glu
       465             470             475             480

       His Arg Phe Glu Leu Ala Leu Gln Leu Gly Glu Leu Lys Ile Ala Tyr
                   485             490             495

       Gln Leu Ala Val Glu Ala Glu Ser Glu Gln Lys Trp Lys Gln Leu Ala
                   500             505             510

       Glu Leu Ala Ile Ser Lys Cys Gln Phe Gly Leu Ala Gln Glu Cys Leu
                   515             520             525

       His His Ala Gln Asp Tyr Gly Gly Leu Leu Leu Leu Ala Thr Ala Ser
           530             535             540

       Gly Asn Ala Asn Met Val Asn Lys Leu Ala Glu Gly Ala Glu Arg Asp
       545             550             555             560

       Gly Lys Asn Asn Val Ala Phe Met Ser Tyr Phe Leu Gln Gly Lys Val
                   565             570             575

       Asp Ala Cys Leu Glu Leu Leu Ile Arg Thr Gly Arg Leu Pro Glu Ala
                   580             585             590

       Ala Phe Leu Ala Arg Thr Tyr Leu Pro Ser Gln Val Ser Arg Val Val
                   595             600             605

       Lys Leu Trp Arg Glu Asn Leu Ser Lys Val Asn Gln Lys Ala Ala Glu
           610             615             620

       Ser Leu Ala Asp Pro Thr Glu Tyr Glu Asn Leu Phe Pro Gly Leu Lys
       625             630             635             640

       Glu Ala Phe Val Val Glu Glu Trp Val Lys Glu Thr His Ala Asp Leu
                   645             650             655

       Trp Pro Ala Lys Gln Tyr Pro Leu Val Thr Pro Asn Glu Glu Arg Asn
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                660                    665                     670
    Val Met Glu Glu Gly Lys Asp Phe Gln Pro Ser Arg Ser Thr Ala Gln
            675                680                685

    Gln Glu Leu Asp Gly Lys Pro Ala Ser Pro Thr Pro Val Ile Val Ala
            690                695                700

    Ser His Thr Ala Asn Lys Glu Glu Lys Ser Leu Leu Glu Leu Glu Val
    705                710                715                720

    Asp Leu Asp Asn Leu Glu Leu Glu Asp Ile Asp Thr Thr Asp Ile Asn
                    725                730                735

    Leu Asp Glu Asp Ile Leu Asp Asp
                    740


<210> 1348
<211> 314
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (87)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1348
Asn Thr Val Val Met Lys Val Ala Glu Gln Thr Pro Leu Ser Ala Leu
 1               5                   10                  15

Tyr Xaa Ala Ser Leu Ile Lys Glu Ala Gly Phe Pro Pro Gly Val Val
                20                  25                  30

Asn Ile Ile Thr Gly Tyr Gly Pro Thr Ala Gly Ala Ala Ile Ala Gln
            35                  40                  45

His Met Asp Val Asp Lys Val Ala Phe Thr Gly Ser Thr Glu Val Gly
        50                  55                  60

His Leu Ile Gln Lys Ala Ala Gly Asp Ser Asn Leu Lys Arg Val Thr
 65                 70                  75                  80

Leu Glu Leu Gly Gly Lys Xaa Pro Ser Ile Val Leu Ala Asp Ala Asp
```

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                    85                      90                      95

Met Glu His Ala Val Glu Gln Cys His Glu Ala Leu Phe Phe Asn Met
            100                 105                 110

Gly Gln Cys Cys Cys Ala Gly Ser Arg Thr Phe Val Glu Glu Ser Ile
            115                 120                 125

Tyr Asn Glu Phe Leu Glu Arg Thr Val Glu Lys Ala Lys Gln Arg Lys
    130                 135                 140

Val Gly Asn Pro Phe Glu Leu Asp Thr Gln Gln Gly Pro Gln Val Asp
145                 150                 155                 160

Lys Glu Gln Phe Glu Arg Val Leu Gly Tyr Ile Gln Leu Gly Gln Lys
                165                 170                 175

Glu Gly Ala Lys Leu Leu Cys Gly Gly Glu Arg Phe Gly Glu Arg Gly
            180                 185                 190

Phe Phe Ile Lys Pro Thr Val Phe Gly Gly Val Gln Asp Asp Met Arg
            195                 200                 205

Ile Ala Lys Glu Glu Ile Phe Gly Pro Val Gln Pro Leu Phe Lys Phe
    210                 215                 220

Lys Lys Ile Glu Glu Val Val Glu Arg Ala Asn Asn Thr Arg Tyr Gly
225                 230                 235                 240

Leu Ala Ala Ala Val Phe Thr Arg Asp Leu Asp Lys Ala Met Tyr Phe
                245                 250                 255

Thr Gln Ala Leu Gln Ala Gly Thr Val Trp Val Asn Thr Tyr Asn Ile
            260                 265                 270

Val Thr Cys His Thr Pro Phe Gly Gly Phe Lys Glu Ser Gly Asn Gly
            275                 280                 285

Arg Glu Leu Gly Glu Asp Gly Leu Lys Ala Tyr Thr Glu Val Lys Thr
290                 295                 300

Val Thr Ile Lys Val Pro Gln Lys Asn Ser
305                 310
```

<210> 1349
<211> 146
<212> PRT
<213> Homo sapiens

<400> 1349
Arg Cys Pro Ile Ala Ser Glu Val Pro Trp Thr Ile Thr Glu Ala Glu
 1   5   10   15

Leu Arg Val Thr Leu Thr Val Glu Gly Lys Ser Ile Pro Cys Leu Ile
             20   25   30

Asp Thr Gly Ala Thr His Ser Thr Leu Pro Ser Phe Gln Gly Pro Val
             35   40   45

Ser Leu Ala Pro Ile Thr Val Val Gly Ile Asp Gly Gln Ala Ser Lys
         50   55   60

Pro Leu Lys Thr Pro Pro Leu Trp Cys Gln Leu Gly Gln His Ser Phe
 65   70   75   80

Met His Ser Phe Leu Val Ile Pro Thr Cys Pro Leu Pro Leu Leu Gly
                 85   90   95

Arg Asn Ile Leu Thr Lys Leu Ser Ala Ser Leu Thr Ile Pro Gly Val
                100   105   110

Gln Leu His Leu Ile Ala Ala Leu Leu Pro Asn Pro Lys Pro Pro Leu
            115   120   125

Cys Pro Leu Thr Ser Pro Gln Tyr His Pro Leu Pro Gln Asp Leu Pro
            130   135   140

Ser Ala
145

<210> 1350
<211> 296
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1350
Pro Thr Arg Pro Arg Thr Arg Gly Ala Ile Phe Ala Ala Arg Thr Arg
 1   5   10   15

Ser Glu Arg Leu Arg Glu Ser Glu Thr Leu Ser Ala Ser Ile Arg Arg
             20   25   30

Ala Asp Pro Ala Gly Ala Ala Ala Ala Met Asp Asp Arg Glu Asp Leu

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                35                        40                        45

    Val Tyr Gln Ala Xaa Leu Ala Glu Gln Ala Glu Arg Tyr Asp Glu Met
            50   .          55              60

    Val Glu Ser Met Lys Lys Val Ala Gly Met Asp Val Glu Leu Thr Val
        65              70              75              80

    Glu Glu Arg Asn Leu Leu Ser Val Ala Tyr Lys Asn Val Ile Gly Ala
                    85              90                      95

    Arg Arg Ala Ser Trp Arg Ile Ile Ser Ser Ile Glu Gln Lys Glu Glu
                100             105             110

    Asn Lys Gly Gly Glu Asp Lys Leu Lys Met Ile Arg Glu Tyr Arg Gln
            115             120             125

    Met Val Glu Thr Glu Leu Lys Leu Ile Cys Cys Asp Ile Leu Asp Val
        130             135             140

    Leu Asp Lys His Leu Ile Pro Ala Ala Asn Thr Gly Glu Ser Lys Val
    145             150             155             160

    Phe Tyr Tyr Lys Met Lys Gly Asp Tyr His Arg Tyr Leu Ala Glu Phe
                165             170             175

    Ala Thr Gly Asn Asp Arg Lys Glu Ala Ala Glu Asn Ser Leu Val Ala
                180             185             190

    Tyr Lys Ala Ala Ser Asp Ile Ala Met Thr Glu Leu Pro Pro Thr His
                195             200             205

    Pro Ile Arg Leu Gly Leu Ala Leu Asn Phe Ser Val Phe Tyr Tyr Glu
        210     .       215             220

    Ile Leu Asn Ser Pro Asp Arg Ala Cys Arg Leu Ala Lys Ala Ala Phe
    225             230             235             240

    Asp Asp Ala Ile Ala Glu Leu Asp Thr Leu Ser Glu Glu Ser Tyr Lys
        .       245             250             255

    Asp Ser Thr Leu Ile Met Gln Leu Leu Arg Asp Asn Leu Thr Leu Trp
                260             265             270

    Thr Ser Asp Met Gln Gly Asp Gly Glu Glu Gln Asn Lys Glu Ala Leu
                275             280             285

    Gln Asp Val Glu Asp Glu Asn Gln
        290             295
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<210> 1351
<211> 184
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (126)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (131)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (136)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (137)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (143)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (146)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (147)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (149)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (152)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (159)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (163)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1351
Gly Ser Ala Pro Glu Thr Ser Pro Glu Lys Cys Ser Ser Arg Ala Lys
 1           5               10              15

Ser Cys Lys Val Ile Arg Lys Asn Ile Val Lys Lys Cys Leu Glu Leu
            20              25              30

Phe Ser Glu Leu Ala Glu Asp Lys Glu Asn Tyr Lys Lys Phe Tyr Glu
         35              40              45

Ala Phe Ser Lys Asn Leu Lys Leu Gly Ile His Glu Asp Ser Thr Asn
      50              55              60

Arg Arg Arg Leu Ser Glu Leu Leu Arg Tyr His Thr Ser Gln Ser Gly
 65              70              75              80

Asp Glu Met Thr Ser Leu Ser Glu Tyr Val Ser Arg Met Lys Glu Thr
            85              90              95

Gln Lys Ser Ile Tyr Tyr Ile Thr Gly Glu Ser Lys Glu Gln Val Ala
            100             105             110

Asn Ser Ala Phe Val Glu Arg Val Arg Lys Arg Gly Phe Xaa Val Val
         115             120             125

Tyr Met Xaa Glu Pro Ile Asp Xaa Xaa Cys Val Gln Gln Leu Xaa Glu
      130             135             140

Phe Xaa Xaa Lys Xaa Leu Val Xaa Val Thr Lys Glu Val Trp Xaa Cys
145             150             155             160

Leu Arg Xaa Arg Arg Glu Glu Glu Asp Gly Arg Glu Gln Gly Lys Phe
            165             170             175

Arg Pro Cys Ser Ser Glu Glu Ser
            180


<210> 1352
<211> 415
```

<212> PRT
<213> Homo sapiens

<400> 1352
```
Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Leu His Leu Lys Glu
1               5               10              15

Asp Gln Thr Glu Tyr Leu Glu Glu Arg Arg Val Lys Glu Val Val Lys
            20              25              30

Lys His Ser Gln Phe Ile Gly Tyr Pro Ile Thr Leu Tyr Leu Glu Lys
        35              40              45

Glu Arg Glu Lys Glu Ile Ser Asp Asp Glu Ala Glu Glu Glu Lys Gly
    50              55              60

Glu Lys Glu Glu Glu Asp Lys Asp Asp Glu Glu Lys Pro Lys Ile Glu
65              70              75              80

Asp Val Gly Ser Asp Glu Glu Asp Asp Ser Gly Lys Asp Lys Lys Lys
            85              90              95

Lys Thr Lys Lys Ile Lys Glu Lys Tyr Ile Asp Gln Glu Glu Leu Asn
            100             105             110

Lys Thr Lys Pro Ile Trp Thr Arg Asn Pro Asp Asp Ile Thr Gln Glu
            115             120             125

Glu Tyr Gly Glu Phe Tyr Lys Ser Leu Thr Asn Asp Trp Glu Asp His
    130             135             140

Leu Ala Val Lys His Phe Ser Val Glu Gly Gln Leu Glu Phe Arg Ala
145             150             155             160

Leu Leu Phe Ile Pro Arg Arg Ala Pro Phe Asp Leu Phe Glu Asn Lys
            165             170             175

Lys Lys Lys Asn Asn Ile Lys Leu Tyr Val Arg Arg Val Phe Ile Met
            180             185             190

Asp Ser Cys Asp Glu Leu Ile Pro Glu Tyr Leu Asn Phe Ile Arg Gly
        195             200             205

Val Val Asp Ser Glu Asp Leu Pro Leu Asn Ile Ser Arg Glu Met Leu
    210             215             220

Gln Gln Ser Lys Ile Leu Lys Val Ile Arg Lys Asn Ile Val Lys Lys
225             230             235             240

Cys Leu Glu Leu Phe Ser Glu Leu Ala Glu Asp Lys Glu Asn Tyr Lys
            245             250             255
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```
Lys Phe Tyr Glu Ala Phe Ser Lys Asn Leu Lys Leu Gly Ile His Glu
            260             265             270

Asp Ser Thr Asn Arg Arg Arg Leu Ser Glu Leu Leu Arg Tyr His Thr
            275             280             285

Ser Gln Ser Gly Asp Glu Met Thr Ser Leu Ser Glu Tyr Val Ser Arg
            290             295             300

Met Lys Glu Thr Gln Lys Ser Ile Tyr Tyr Ile Thr Gly Glu Ser Lys
305             310             315             320

Glu Gln Val Ala Asn Ser Ala Phe Val Glu Arg Val Arg Lys Arg Gly
                325             330             335

Phe Glu Val Val Tyr Met Thr Glu Pro Ile Asp Glu Tyr Cys Val Gln
            340             345             350

Gln Leu Lys Glu Phe Asp Gly Lys Ser Leu Val Ser Val Thr Lys Glu
            355             360             365

Gly Leu Glu Leu Pro Glu Asp Glu Glu Glu Lys Lys Lys Met Glu Glu
            370             375             380

Ser Lys Ala Lys Phe Glu Asn Leu Cys Lys Leu Met Gly Tyr Met Met
385             390             395             400

Ala Lys Lys His Trp Arg Ser Thr Leu Thr Thr Pro Phe Leu Glu
            405             410             415
```

<210> 1353
<211> 256
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1353
```
Ser Pro Ile Ser Asp Gly Asn Asp Ala Xaa Leu Arg His Val Asn Ile
  1             5             10             15

Asp His Leu His Val Gly Trp Tyr Gln Ser Thr Tyr Tyr Gly Ser Phe
            20             25             30

Val Thr Arg Ala Leu Leu Asp Ser Gln Phe Ser Tyr Gln His Ala Ile
```

```
                    35                    40                    45

    Glu Glu Ser Val Val Leu Ile Tyr Asp Pro Ile Lys Thr Ala Gln Gly
            50                  55                  60

    Ser Leu Ser Leu Lys Ala Tyr Arg Leu Thr Pro Lys Leu Met Glu Val
            65                  70                  75                  80

    Cys Lys Glu Lys Asp Phe Ser Pro Glu Ala Leu Lys Lys Ala Asn Ile
                    85                  90                  95

    Thr Phe Glu Tyr Met Phe Glu Glu Val Pro Ile Val Ile Lys Asn Ser
                    100                 105                 110

    His Leu Ile Asn Val Leu Met Trp Glu Leu Glu Lys Lys Ser Ala Val
                    115                 120                 125

    Ala Asp Lys His Glu Leu Leu Ser Leu Ala Ser Ser Asn His Leu Gly
            130                 135                 140

    Lys Asn Leu Gln Leu Leu Met Asp Arg Val Asp Glu Met Ser Gln Asp
    145                 150                 155                 160

    Ile Val Lys Tyr Asn Thr Tyr Met Arg Asn Thr Ser Lys Gln Gln Gln
                    165                 170                 175

    Gln Lys His Gln Tyr Gln Gln Arg Arg Gln Gln Glu Asn Met Gln Arg
                    180                 185                 190

    Gln Ser Arg Gly Glu Pro Pro Leu Pro Glu Glu Asp Leu Ser Lys Leu
                    195                 200                 205

    Phe Lys Pro Pro Gln Pro Pro Ala Arg Met Asp Ser Leu Leu Ile Ala
            210                 215                 220

    Gly Gln Ile Asn Thr Tyr Cys Gln Asn Ile Lys Glu Phe Thr Ala Gln
    225                 230                 235                 240

    Asn Leu Gly Lys Leu Phe Met Ala Gln Ala Leu Gln Glu Tyr Asn Asn
                    245                 250                 255
```

<210> 1354
<211> 210
<212> PRT
<213> Homo sapiens

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<220>
<221> SITE
<222> (192)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (208)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1354
Ile Met Lys Leu Leu Thr Arg Ala Gly Ser Phe Ser Arg Phe Tyr Ser
 1               5                  10                  15

Leu Lys Val Ala Pro Lys Val Lys Ala Thr Ala Ala Pro Ala Gly Ala
                20              25              30

Pro Pro Gln Pro Gln Asp Leu Glu Phe Thr Lys Leu Pro Asn Gly Leu
        35              40                  45

Val Ile Ala Ser Leu Glu Asn Tyr Ser Pro Val Ser Arg Ile Gly Leu
        50              55                  60

Phe Ile Lys Ala Gly Ser Arg Tyr Glu Asp Phe Ser Asn Leu Gly Thr
65              70                  75                  80

Thr His Leu Leu Arg Leu Thr Ser Ser Leu Thr Thr Lys Gly Ala Ser
                85                  90                  95

Ser Phe Lys Ile Thr Arg Gly Ile Glu Ala Val Gly Gly Lys Leu Ser
                100             105             110

Val Thr Ala Thr Arg Glu Asn Met Ala Tyr Thr Val Glu Cys Leu Arg
        115             120             125

Gly Asp Val Asp Ile Leu Met Glu Phe Leu Leu Asn Val Thr Thr Ala
    130             135             140

Pro Glu Phe Arg Arg Trp Glu Val Ala Asp Leu Gln Pro Gln Leu Lys
145             150             155             160

Ile Asp Lys Ala Val Ala Phe Gln Asn Pro Gln Thr His Val Ile Glu
            165             170             175

Asn Leu His Ala Ala Ala Tyr Arg Asn Ala Leu Ala Asn Pro Leu Xaa
            180             185             190

Cys Pro Asp Tyr Arg Ile Gly Lys Val Thr Ser Glu Glu Val Pro Xaa
        195             200             205

Lys Leu
```

210

<210> 1355
<211> 316
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (309)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1355
Ser Ser Ala Ser Leu Pro Gly Ala Val Ala Ala Leu Ser Pro Leu Arg
 1   5   10   15

Ile Met Ala Thr Ala Glu Val Leu Asn Ile Gly Lys Lys Leu Tyr Glu
                20   25   30

Gly Lys Thr Lys Glu Val Tyr Glu Leu Leu Asp Ser Pro Gly Lys Val
            35   40   45

Leu Leu Gln Ser Lys Asp Gln Ile Thr Ala Gly Asn Ala Ala Arg Lys
    50   55   60

Asn His Leu Glu Gly Lys Ala Ala Ile Ser Asn Lys Ile Thr Ser Cys
65   70   75   80

Ile Phe Gln Leu Leu Gln Glu Ala Gly Ile Lys Thr Ala Phe Thr Arg
                85   90   95

Lys Cys Gly Glu Thr Ala Phe Ile Ala Pro Gln Cys Glu Met Ile Pro
            100   105   110

Ile Glu Trp Val Cys Arg Arg Ile Ala Thr Gly Ser Phe Leu Lys Arg
            115   120   125

Asn Pro Gly Val Lys Glu Gly Tyr Lys Phe Tyr Pro Pro Lys Val Glu
    130   135   140

Leu Phe Phe Lys Asp Asp Ala Asn Asn Asp Pro Gln Trp Ser Glu Glu
145   150   155   160

Gln Leu Ile Ala Ala Lys Phe Cys Phe Ala Gly Leu Leu Ile Gly Gln
                165   170   175

Thr Glu Val Asp Ile Met Ser His Ala Thr Gln Ala Ile Phe Glu Ile
            180   185   190

```
Leu Glu Lys Ser Trp Leu Pro Gln Asn Cys Thr Leu Val Asp Met Lys
        195             200             205

Ile Glu Phe Gly Val Asp Val Thr Thr Lys Glu Ile Val Leu Ala Asp
        210             215             220

Val Ile Asp Asn Asp Ser Trp Arg Leu Trp Pro Ser Gly Asp Arg Ser
225             230             235             240

Gln Gln Lys Asp Lys Gln Ser Tyr Arg Asp Leu Lys Glu Val Thr Pro
            245             250             255

Glu Gly Leu Gln Met Val Lys Lys Asn Phe Glu Trp Val Ala Glu Arg
            260             265             270

Val Glu Leu Leu Leu Lys Ser Glu Ser Gln Cys Arg Val Val Val Leu
        275             280             285

Met Gly Ser Thr Ser Asp Leu Gly His Cys Glu Lys Ile Lys Lys Ala
        290             295             300

Cys Gly Asn Phe Xaa His Ser Met Val Asn Phe Glu
305             310             315


<210> 1356
<211> 368
<212> PRT
<213> Homo sapiens

<400> 1356
Pro Gly Ser Ala Cys Lys Ala Val Ser Ser Leu Pro Gln Glu Lys Met
  1             5              10              15

Ala Val Ala Val Arg Thr Leu Gln Glu Gln Leu Glu Lys Ala Lys Glu
            20              25              30

Ser Leu Lys Asn Val Asp Glu Asn Ile Arg Lys Leu Thr Gly Arg Asp
        35              40              45

Pro Asn Asp Val Arg Pro Ile Gln Ala Arg Leu Leu Ala Leu Ser Gly
        50              55              60

Pro Gly Gly Gly Arg Gly Arg Gly Ser Leu Leu Leu Arg Arg Gly Phe
65              70              75              80

Ser Asp Ser Gly Gly Gly Pro Pro Ala Lys Gln Arg Asp Leu Glu Gly
            85              90              95

Ala Val Ser Arg Leu Gly Gly Glu Arg Arg Thr Arg Arg Glu Ser Arg
```

```
              100                    105                    110

Gln Glu Ser Asp Pro Glu Asp Asp Val Lys Lys Pro Ala Leu Gln
        115             120             125

Ser Ser Val Val Ala Thr Ser Lys Glu Arg Thr Arg Arg Asp Leu Ile
    130             135             140

Gln Asp Gln Asn Met Asp Glu Lys Gly Lys Gln Arg Asn Arg Arg Ile
145             150             155             160

Phe Gly Leu Leu Met Gly Thr Leu Gln Lys Phe Lys Gln Glu Ser Thr
            165             170             175

Val Ala Thr Glu Arg Gln Lys Arg Arg Gln Glu Ile Glu Gln Lys Leu
            180             185             190

Glu Val Gln Ala Glu Glu Glu Arg Lys Gln Val Glu Asn Glu Arg Arg
        195             200             205

Glu Leu Phe Glu Glu Arg Arg Ala Lys Gln Thr Glu Leu Arg Leu Leu
    210             215             220

Glu Gln Lys Val Glu Leu Ala Gln Leu Gln Glu Glu Trp Asn Glu His
225             230             235             240

Asn Ala Lys Ile Ile Lys Tyr Ile Arg Thr Lys Thr Lys Pro His Leu
            245             250             255

Phe Tyr Ile Pro Gly Arg Met Cys Pro Ala Thr Gln Lys Leu Ile Glu
            260             265             270

Glu Ser Gln Arg Lys Met Asn Ala Leu Phe Glu Gly Arg Arg Ile Glu
        275             280             285

Phe Ala Glu Gln Ile Asn Lys Met Glu Ala Arg Pro Arg Arg Gln Ser
    290             295             300

Met Lys Glu Lys Glu His Gln Val Val Arg Asn Glu Glu Gln Lys Ala
305             310             315             320

Glu Gln Glu Glu Gly Lys Val Ala Gln Arg Glu Glu Glu Leu Glu Glu
            325             330             335

Thr Gly Asn Gln His Asn Asp Val Glu Lys Lys Glu Lys Lys Gly Lys
            340             345             350

Glu Glu Lys Lys Glu Arg Lys Lys Arg Lys Glu Arg Lys Glu Lys Lys
        355             360             365
```

<210> 1357
<211> 201
<212> PRT
<213> Homo sapiens

<400> 1357
Ala Leu Ile Met Ser Phe Ile Phe Glu Trp Ile Tyr Asn Gly Phe Ser
 1   5   10   15

Ser Val Leu Gln Phe Leu Gly Leu Tyr Lys Lys Ser Gly Lys Leu Val
                 20   25   30

Phe Leu Gly Leu Asp Asn Ala Gly Lys Thr Thr Leu Leu His Met Leu
             35   40   45

Lys Asp Asp Arg Leu Gly Gln His Val Pro Thr Leu His Pro Thr Ser
     50   55   60

Glu Glu Leu Thr Ile Ala Gly Met Thr Phe Thr Thr Phe Asp Leu Gly
 65   70   75   80

Gly His Glu Gln Ala Arg Arg Val Trp Lys Asn Tyr Leu Pro Ala Ile
                 85   90   95

Asn Gly Ile Val Phe Leu Val Asp Cys Ala Asp His Ser Arg Leu Val
            100   105   110

Glu Ser Lys Val Glu Leu Asn Ala Leu Met Thr Asp Glu Thr Ile Ser
        115   120   125

Asn Val Pro Ile Leu Ile Leu Gly Asn Lys Ile Asp Arg Thr Asp Ala
    130   135   140

Ile Ser Glu Glu Lys Leu Arg Glu Ile Phe Gly Leu Tyr Gly Gln Thr
145   150   155   160

Thr Gly Lys Gly Asn Val Thr Leu Lys Glu Leu Asn Ala Arg Pro Met
                165   170   175

Glu Val Phe Met Cys Ser Val Leu Lys Arg Gln Gly Tyr Gly Glu Gly
            180   185   190

Phe Arg Trp Leu Ser Gln Tyr Ile Asp
        195   200

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<210> 1358
<211> 224
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (71)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (129)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (169)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (196)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (221)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1358
Val Ser Gln Cys Ala Ala Arg Tyr Gly Pro Thr Gly Pro Arg Gly Arg
 1               5                  10                  15

Arg Arg His Gly Ala Val Phe Asp Leu Asp Leu Glu Thr Glu Glu Gly
                20                  25                  30

Ser Glu Gly Glu Gly Glu Pro Glu Leu Ser Pro Ala Asp Ala Cys Pro
                35                  40                  45

Leu Ala Glu Leu Arg Ala Ala Gly Leu Glu Pro Val Gly His Tyr Glu
        50                  55                  60

Glu Val Phe Gln Val Arg Xaa Val Gln Gly Thr Asn Leu Gly Lys Ile
 65                  70                  75                  80

Tyr Ala Met Lys Val Leu Arg Lys Ala Lys Ile Val Arg Asn Ala Lys
                85                  90                  95

Asp Thr Ala His Thr Arg Ala Glu Arg Asn Ile Leu Glu Ser Val Lys
                100                 105                 110
```

```
His Pro Phe Ile Val Glu Leu Ala Tyr Ala Phe Gln Thr Gly Gly Lys
        115             120             125

Xaa Tyr Leu Ile Leu Glu Cys Leu Ser Gly Gly Glu Leu Phe Thr His
        130             135             140

Leu Gly Ala Arg Gly His Leu Pro Gly Lys Ile Arg Pro Ala Ser Thr
145             150             155             160

Trp Leu Arg Ser Arg Trp Pro Trp Xaa Ile Ser Thr Pro Arg Ala Ser
                165             170             175

Ser Thr Gly Asp Leu Lys Pro Glu Glu His His Gly Ser Ala Ala Arg
                180             185             190

Ala His Ile Xaa Thr Asp Arg Leu Leu Asp Phe Trp Gln Gly Val Leu
        195             200             205

Phe His Gly Gly Arg Pro Ser Ile Asp Asn Phe Leu Xaa Ala Thr Ile
        210             215             220
```

<210> 1359
<211> 336
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (225)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (230)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1359
```
Gly Gly Arg Pro Glu Thr Glu Lys Gly Glu Ser Gly Ser Phe Pro Ala
 1           5               10              15

Arg Arg Thr Phe Glu Val Glu Lys Arg Thr Pro Gly Thr Cys Ala Gln
            20              25              30

His Trp Asp Phe Leu Asp Ser Thr Met Thr Leu Asn Asn Val Thr Met
        35              40              45
```

```
Arg Gln Gly Thr Val Gly Met Gln Pro Gln Gln Gln Arg Trp Ser Ile
    50              55                  60

Pro Ala Asp Gly Arg His Leu Met Val Gln Lys Glu Pro His Gln Tyr
65              70                  75                  80

Ser His Arg Asn Arg His Ser Ala Thr Pro Glu Asp His Cys Arg Arg
                85                  90                  95

Ser Trp Ser Ser Asp Ser Thr Asp Ser Val Ile Ser Ser Glu Ser Gly
            100                 105                 110

Asn Thr Tyr Tyr Arg Val Val Leu Ile Gly Glu Gln Gly Val Gly Lys
            115                 120                 125

Ser Thr Leu Ala Asn Ile Phe Ala Gly Val His Asp Ser Met Asp Ser
    130                 135                 140

Asp Cys Glu Val Leu Gly Glu Asp Thr Tyr Glu Arg Thr Leu Met Val
145                 150                 155                 160

Asp Gly Glu Ser Ala Thr Ile Ile Leu Leu Asp Met Trp Glu Asn Lys
                165                 170                 175

Gly Glu Asn Glu Trp Leu His Asp His Cys Met Gln Val Gly Asp Ala
            180                 185                 190

Tyr Leu Ile Val Tyr Ser Ile Thr Asp Arg Ala Ser Phe Glu Lys Ala
            195                 200                 205

Ser Glu Leu Arg Ile Gln Leu Arg Arg Ala Arg Gln Thr Glu Asp Ile
    210                 215                 220

Xaa Ile Ile Leu Val Xaa Asn Lys Ser Asp Leu Val Arg Cys Arg Glu
225                 230                 235                 240

Val Ser Val Ser Glu Gly Arg Ala Cys Ala Val Val Phe Asp Cys Lys
                245                 250                 255

Phe Ile Glu Thr Ser Ala Ala Val Gln His Asn Val Lys Glu Leu Phe
            260                 265                 270

Glu Gly Ile Val Arg Gln Val Arg Leu Arg Arg Ser Ser Lys Glu Lys
            275                 280                 285

Asn Glu Arg Arg Leu Ala Tyr Gln Lys Arg Lys Glu Ser Met Pro Arg
    290                 295                 300

Lys Ala Arg Arg Phe Trp Gly Lys Ile Val Ala Lys Asn Asn Lys Asn
305                 310                 315                 320
```

```
Met Ala Phe Lys Leu Lys Ser Lys Ser Cys His Asp Leu Ser Val Leu
            325             330             335
```

```
<210> 1360
<211> 344
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1360
Thr Xaa Asn Leu Gln Arg Phe Gly Met Asn Gly Gln Met Leu Cys Asn
 1           5               10              15

Leu Gly Lys Glu Arg Phe Leu Glu Leu Ala Pro Asp Phe Val Gly Asp
            20              25              30

Ile Leu Trp Glu His Leu Glu Gln Met Ile Lys Glu Asn Gln Glu Lys
        35              40              45

Thr Glu Asp Gln Tyr Glu Glu Asn Ser His Leu Thr Ser Val Pro His
    50              55              60

Trp Ile Asn Ser Asn Thr Leu Gly Phe Gly Thr Glu Gln Ala Pro Tyr
65              70              75              80

Gly Met Gln Thr Gln Asn Tyr Pro Lys Gly Gly Leu Leu Asp Ser Met
                85              90              95

Cys Pro Ala Ser Thr Pro Ser Val Leu Ser Ser Glu Gln Glu Phe Gln
            100             105             110

Met Phe Pro Lys Ser Arg Leu Ser Ser Val Ser Val Thr Tyr Cys Ser
        115             120             125

Val Ser Gln Asp Phe Pro Gly Ser Asn Leu Asn Leu Leu Thr Asn Asn
    130             135             140

Ser Gly Thr Pro Lys Asp His Asp Ser Pro Glu Asn Gly Ala Asp Ser
145             150             155             160

Phe Glu Ser Ser Asp Ser Leu Leu Gln Ser Trp Asn Ser Gln Ser Ser
```

```
                    165                    170                    175

    Leu Leu Asp Val Gln Arg Val Pro Ser Phe Glu Ser Phe Glu Asp Asp
                180                185                190

    Cys Ser Gln Ser Leu Cys Leu Asn Lys Pro Thr Met Ser Phe Lys Asp
                195                200                205

    Tyr Ile Gln Glu Arg Ser Asp Pro Val Glu Gln Gly Lys Pro Val Ile
                210                215                220

    Pro Ala Ala Val Leu Ala Gly Phe Thr Gly Ser Gly Pro Ile Gln Leu
    225                230                235                240

    Trp Gln Phe Leu Leu Glu Leu Leu Ser Asp Lys Ser Cys Gln Ser Phe
                245                250                255

    Ile Ser Trp Thr Gly Asp Gly Trp Glu Phe Lys Leu Ala Asp Pro Asp
                260                265                270

    Glu Val Ala Arg Arg Trp Gly Lys Arg Lys Asn Lys Pro Lys Met Asn
                275                280                285

    Tyr Glu Lys Leu Ser Arg Gly Leu Arg Tyr Tyr Tyr Asp Lys Asn Ile
                290                295                300

    Ile His Lys Thr Ser Gly Lys Arg Tyr Val Tyr Arg Phe Val Cys Asp
    305                310                315                320

    Leu Gln Asn Leu Leu Gly Phe Thr Pro Glu Glu Leu His Ala Ile Leu
                325                330                335

    Gly Val Gln Pro Asp Thr Glu Asp
                340
```

<210> 1361
<211> 137
<212> PRT
<213> Homo sapiens

<400> 1361

```
    Ala Ser Ala His Thr Cys Thr Pro Pro Gly His Ser Thr Met Pro Ala
    1                5                10                15

    Cys Arg Leu Gly Pro Leu Ala Ala Ala Leu Leu Leu Ser Leu Leu Leu
                20                25                30

    Phe Gly Phe Thr Leu Val Ser Gly Thr Gly Ala Glu Lys Thr Gly Val
                35                40                45
```

```
Cys Pro Glu Leu Gln Ala Asp Gln Asn Cys Thr Gln Glu Cys Val Ser
    50              55                  60

Asp Ser Glu Cys Ala Asp Asn Leu Lys Cys Cys Ser Ala Gly Cys Ala
65              70              75                  80

Thr Phe Cys Ser Leu Pro Asn Asp Lys Glu Gly Ser Cys Pro Gln Val
            85                  90                  95

Asn Ile Asn Phe Pro Gln Leu Gly Leu Cys Arg Asp Gln Cys Gln Val
            100             105                 110

Asp Ser Gln Cys Pro Gly Gln Met Lys Cys Cys Arg Asn Gly Cys Gly
            115             120                 125

Lys Val Ser Cys Val Thr Pro Asn Phe
    130             135
```

```
<210> 1362
<211> 162
<212> PRT
<213> Homo sapiens

<400> 1362
Thr Lys Leu Val Met Met Gln Lys Leu Leu Lys Cys Ser Arg Leu Val
1               5                   10                  15

Leu Ala Leu Ala Leu Ile Leu Val Leu Glu Ser Ser Val Gln Gly Tyr
            20                  25                  30

Pro Thr Gln Arg Ala Arg Tyr Gln Trp Val Arg Cys Asn Pro Asp Ser
        35              40                  45

Asn Ser Ala Asn Cys Leu Glu Glu Lys Gly Pro Met Phe Glu Leu Leu
    50              55                  60

Pro Gly Glu Ser Asn Lys Ile Pro Arg Leu Arg Thr Asp Leu Phe Pro
65              70                  75                  80

Lys Thr Arg Ile Gln Asp Leu Asn Arg Ile Phe Pro Leu Ser Glu Asp
            85                  90                  95

Tyr Ser Gly Ser Gly Phe Gly Ser Gly Ser Gly Ser Gly Ser Gly Ser
            100             105                 110

Gly Ser Gly Phe Leu Thr Glu Met Glu Gln Asp Tyr Gln Leu Val Asp
            115             120                 125
```

```
Glu Ser Asp Ala Phe His Asp Asn Leu Arg Ser Leu Asp Arg Asn Leu
    130             135             140

Pro Ser Asp Ser Gln Asp Leu Gly Gln His Gly Leu Glu Glu Asp Phe
145             150             155             160

Met Leu
```

```
<210> 1363
<211> 113
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (106)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1363
Thr Pro Thr Pro Phe Gly Ser Ala Arg Ala Pro Gln Ala Arg Pro Gly
    1               5               10              15

Arg Arg Asp Gly Arg Met Ser Gly Gly Arg Arg Lys Glu Glu Pro Pro
                20              25              30

Gln Pro Gln Leu Ala Asn Gly Ala Leu Lys Val Ser Val Trp Ser Lys
            35              40              45

Val Leu Arg Ser Asp Ala Ala Trp Glu Asp Lys Asp Glu Phe Leu Asp
        50              55              60

Val Ile Tyr Trp Phe Arg Gln Ile Ile Ala Val Val Leu Gly Val Ile
    65              70              75              80

Leu Gly Ser Phe Ala Ile Thr Arg Val Leu Gly Asn Ser Arg Ile Leu
                85              90              95

Pro Asp Gln Cys Lys Ser Pro Cys Thr Xaa Thr Ser Ala Ile Thr Thr
                100             105             110

Asp
```

```
<210> 1364
<211> 217
<212> PRT
```

<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1364

```
Xaa Gly Gly Arg Ser Ser Ser Ser Thr Met Ser Thr Gly Gly Asp Phe
 1               5               10              15

Gly Asn Pro Leu Arg Lys Phe Lys Leu Val Phe Leu Gly Glu Gln Ser
            20              25              30

Xaa Gly Lys Thr Ser Leu Ile Thr Arg Phe Met Tyr Asp Ser Phe Asp
        35              40              45

Asn Thr Tyr Gln Ala Thr Ile Gly Ile Asp Phe Leu Ser Lys Thr Met
    50              55              60

Tyr Leu Glu Asp Arg Thr Val Arg Leu Gln Leu Trp Asp Thr Ala Gly
65              70              75              80

Gln Glu Arg Phe Arg Ser Leu Ile Pro Ser Tyr Ile Arg Asp Ser Thr
            85              90              95

Val Ala Val Val Val Tyr Asp Ile Thr Asn Val Asn Ser Phe Gln Gln
            100             105             110

Thr Thr Lys Trp Ile Asp Asp Val Arg Thr Glu Arg Gly Ser Asp Val
            115             120             125

Ile Ile Met Leu Val Gly Asn Lys Thr Asp Leu Ala Asp Lys Arg Gln
    130             135             140

Val Ser Ile Glu Glu Gly Glu Arg Lys Ala Lys Glu Leu Asn Val Met
145             150             155             160

Phe Ile Glu Thr Ser Ala Lys Ala Gly Tyr Asn Val Lys Gln Leu Phe
            165             170             175

Arg Arg Val Ala Ala Ala Leu Pro Gly Met Glu Ser Thr Gln Asp Arg
            180             185             190

Ser Arg Glu Asp Met Ile Asp Ile Lys Leu Glu Lys Pro Gln Glu Gln
            195             200             205
```

```
Pro Val Ser Glu Gly Gly Cys Ser Cys
    210             215
```

```
<210> 1365
<211> 103
<212> PRT
<213> Homo sapiens

<400> 1365
Lys Ser Leu Asp Ser Val Glu Leu Ser Arg Ser Phe Thr Ile Tyr Ser
 1               5                  10                  15

Ser Val Cys Lys Leu Tyr Leu Leu Tyr Ser Gln Ser Ile Phe Thr Val
            20          25                  30

Leu Thr Ile Asp Ser Phe Pro Leu Leu Ile Phe Phe Phe Val Asn Gly
            35              40                  45

Ser Cys Asp Phe Arg Trp Gly Ile Phe Ser Ser Pro Lys Arg Ile Asp
    50                  55              60

Ser Phe Ser Arg Phe Ile Ile Ile Asp Cys Gln Glu Arg Thr Leu Gln
 65              70              75                  80

Gln Gly Cys Thr Leu Asn Ala Val Asp Gly Leu Ser Ser Arg Ile Tyr
                85              90                  95

Arg Leu Gly Leu Met Pro Met
                100
```

```
<210> 1366
<211> 73
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (46)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
```

```
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids


<400> 1366
Arg His Cys Met Val Ser Ala Val Val Pro Leu Phe Ile Ser Pro Pro
 1               5                  10                  15


Asp Xaa Phe Ile Pro His Leu Ile Phe Phe Leu Ala Ala Phe Asn Glu
            20                  25                  30


Ser Phe Ile Leu Glu Thr Leu Tyr Ile Phe Gly Phe His Xaa Thr Ile
            35                  40                  45


Leu Thr Leu Phe Cys Pro Val Thr Phe Leu Lys Lys Thr Lys Thr Lys
        50                  55                  60


Asn Pro Phe Xaa Leu Phe Lys Phe Trp
 65                  70




<210> 1367
<211> 238
<212> PRT
<213> Homo sapiens


<220>
<221> SITE
<222> (199)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
<222> (202)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
<222> (211)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
<222> (229)
<223> Xaa equals any of the naturally occurring L-amino acids


<400> 1367
Gly Ile Asp Pro Arg Val Arg Leu Ala Pro Leu Gly Leu Gln Val Ser
 1               5                  10                  15
```

```
Val Glu Gln Arg Thr Pro Val Ser Val Pro Gln Met Gly Phe Val Lys
            20              25              30

Val Val Lys Asn Lys Ala Tyr Phe Lys Arg Tyr Gln Val Lys Phe Arg
            35              40              45

Arg Arg Arg Glu Gly Lys Thr Asp Tyr Tyr Ala Arg Lys Arg Leu Val
        50              55              60

Ile Gln Asp Lys Asn Lys Tyr Asn Thr Pro Lys Tyr Arg Met Ile Val
    65              70              75              80

Arg Val Thr Asn Arg Asp Ile Ile Cys Gln Ile Ala Tyr Ala Arg Ile
            85              90              95

Glu Gly Asp Met Ile Val Cys Ala Ala Tyr Ala His Glu Leu Pro Lys
            ·100            105             110

Tyr Gly Val Lys Val Gly Leu Thr Asn Tyr Ala Ala Ala Tyr Cys Thr
        115             120             125

Gly Leu Leu Leu Ala Arg Arg Leu Leu Asn Arg Phe Gly Met Asp Lys
    130             135             140

Ile Tyr Glu Gly Gln Val Glu Val Thr Gly Asp Glu Tyr Asn Val Glu
145             150             155             160

Ser Ile Asp Gly Gln Pro Gly Ala Phe Thr Cys Tyr Leu Asp Ala Gly
            165             170             175

Leu Ala Arg Thr Thr Thr Gly Asn Lys Val Phe Gly Ala Leu Lys Gly
            180             185             190

Ala Val Asp Gly Gly Leu Xaa Ile Pro Xaa Ser Thr Lys Arg Phe Pro
        195             200             205

Gly Tyr Xaa Ser Glu Ser Lys Glu Phe Asn Ala Glu Val His Arg Lys
    210             215             220

His Ile Met Gly Xaa Glu Trp Leu Gln Ile Thr Cys Ala Thr
225             230             235
```

<210> 1368
<211> 173
<212> PRT
<213> Homo sapiens

<220>
<221> SITE

<222> (149)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (150)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1368
Gly Asp Ser Gln Gly Pro Ala Ser Asp Trp Arg Val Arg Asp Leu Arg
 1   5   10   15

Pro Val Trp Gly Arg Trp Arg Pro Ala Gln His Leu Lys Ile Thr Asp
            20   25   30

Ser Ala Gly His Ile Leu Tyr Ser Lys Glu Asp Ala Thr Lys Gly Lys
            35   40   45

Phe Ala Phe Thr Thr Glu Asp Tyr Asp Met Phe Glu Val Cys Phe Glu
      50   55   60

Ser Lys Gly Thr Gly Arg Ile Pro Asp Gln Leu Val Ile Leu Asp Met
 65   70   75   80

Lys His Gly Val Glu Ala Lys Asn Tyr Glu Glu Ile Ala Lys Val Glu
                85   90   95

Lys Leu Lys Pro Leu Glu Val Glu Leu Arg Arg Leu Glu Asp Leu Ser
            100   105   110

Glu Ser Ile Val Asn Asp Phe Ala Tyr Met Lys Lys Arg Glu Glu Glu
            115   120   125

Met Arg Asp Thr Asn Glu Ser Thr Asn Thr Arg Val Leu Tyr Phe Ser
    130   135   140

Ile Phe Ser Met Xaa Xaa Leu Ile Gly Leu Ala Thr Trp Gln Val Phe
145   150   155   160

Tyr Leu Arg Arg Phe Phe Lys Ala Lys Lys Leu Ile Glu
            165   170

<210> 1369
<211> 98
<212> PRT
<213> Homo sapiens

<400> 1369
Leu Cys Tyr Leu Asp Ile Cys Gly Lys Ala Glu Ser Phe Leu Thr Val

```
      1                5                          10                          15

   Lys Ala Glu Val Ser Thr Gly Gly Asn Leu Leu Val Val Ser Pro Thr
                20                      25                      30

   Thr Leu Pro Arg Val Leu Ser Thr Lys Glu Val Lys Arg Thr Glu Lys
                35                      40                      45

   Glu Ile Ser Ile Ser Ala Ala Arg Ala Gly Ile Cys Leu Pro Asp Ser
                50                      55                      60

   Leu Cys Phe Leu Phe His Arg His Pro Phe Arg Arg Glu Leu His Gln
       65                      70                      75                      80

   Phe Ile Met Arg Val Arg Glu Ala Lys Ala Leu Arg Cys Val Gln Gly
                        85                      90                      95

   Val Thr
```

<210> 1370
<211> 168
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (127)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1370

```
   Pro Ala Leu Gly Arg Phe Cys Gly Ser Lys Lys Pro Glu Pro Val Leu
       1             .   5                      10                      15

   Ala Thr Gly Ser Arg Met Phe Leu Arg Phe Tyr Ser Asp Asn Ser Val
                20                      25                      30

   Gln Arg Lys Gly Phe Gln Ala Ser His Ala Thr Glu Cys Gly Gly Gln
                35                      40                      45

   Val Arg Ala Asp Val Lys Thr Lys Asp Leu Tyr Ser His Ala Gln Phe
                50                      55                      60

   Gly Asp Asn Asn Tyr Pro Gly Gly Val Asp Cys Glu Trp Val Ile Val
       65                      70          -           75                      80

   Ala Glu Glu Gly Tyr Gly Val Glu Leu Val Phe Gln Thr Phe Glu Val
                        85                      90                      95
```

```
Glu Glu Glu Thr Asp Cys Gly Tyr Asp Tyr Met Glu Leu Phe Asp Gly
            100                     105             110

Tyr Asp Ser Thr Ala Pro Arg Leu Gly Arg Tyr Cys Gly Ser Xaa Pro
            115             120             125

Pro Glu Glu Val Tyr Ser Ala Gly Asp Ser Ala Val Ser His Ser Ile
    130             135             140

His His Thr Lys Lys Gly Phe His Leu Arg Tyr Thr Ser Thr Lys Phe
145             150             155             160

Gln Asp Thr Leu His Ser Arg Lys
                165
```

<210> 1371
<211> 141
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (131)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (139)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1371

```
Phe Asp Arg Gly Ala Arg Leu Pro Asp Gly Leu Gly Leu Trp Ser Leu
1               5               10              15

Arg Gly Pro Leu Arg Arg Leu Val Leu Phe Tyr Gln Gly Lys Leu Cys
            20              25              30

Ser Met Ala Gly Asn Phe Trp Gln Ser Ser His Tyr Leu Gln Trp Ile
            35              40              45

Leu Asp Lys Gln Asp Leu Leu Lys Glu Arg Gln Lys Asp Leu Lys Phe
    50              55              60

Leu Ser Glu Glu Glu Tyr Trp Lys Leu Gln Ile Phe Phe Thr Asn Val
65              70              75              80

Ile Gln Ala Leu Gly Glu His Leu Lys Leu Arg Gln Gln Val Ile Ala
            85              90              95
```

Thr Ala Thr Val Tyr Phe Lys Arg Phe Tyr Ala Arg Tyr Ser Leu Lys
                100   105   110

Ser Ile Asp Pro Val Leu Met Ala Pro Thr Cys Val Phe Leu Ala Ser
            115   120   125

Lys Val Xaa Gly Lys Lys Ile Phe Phe Phe Xaa Gly Gly
        130   135   140

<210> 1372
<211> 327
<212> PRT
<213> Homo sapiens

<400> 1372
Lys Gly Val Phe Gly Phe Arg Trp Gly Leu Ala Ala Pro Glu Pro Ser
  1   5   10   15

Met Ala Ser Ser Arg Ala Ser Ser Thr Ala Thr Lys Thr Lys Ala Pro
                20   25   30

Asp Asp Leu Val Ala Pro Val Val Lys Lys Pro His Ile Tyr Tyr Gly
            35   40   45

Ser Leu Glu Glu Lys Glu Arg Glu Arg Leu Ala Lys Gly Glu Ser Gly
        50   55   60

Ile Leu Gly Lys Asp Gly Leu Lys Ala Gly Ile Glu Ala Gly Asn Ile
 65   70   75   80

Asn Ile Thr Ser Gly Glu Val Phe Glu Ile Glu Glu His Ile Ser Glu
                85   90   95

Arg Gln Ala Glu Val Leu Ala Glu Phe Glu Arg Arg Lys Arg Ala Arg
                100   105   110

Gln Ile Asn Val Ser Thr Asp Asp Ser Glu Val Lys Ala Cys Leu Arg
            115   120   125

Ala Leu Gly Glu Pro Ile Thr Leu Phe Gly Glu Gly Pro Ala Glu Arg
        130   135   140

Arg Glu Arg Leu Arg Asn Ile Leu Ser Val Val Gly Thr Asp Ala Leu
145   150   155   160

Lys Lys Thr Lys Lys Asp Asp Glu Lys Ser Lys Lys Ser Lys Glu Glu
                165   170   175

Tyr Gln Gln Thr Trp Tyr His Glu Gly Pro Asn Ser Leu Lys Val Ala

```
              180                    185                    190

     Arg Leu Trp Ile Ala Asn Tyr Ser Leu Pro Arg Ala Met Lys Arg Leu
             195                    200                    205

     Glu Glu Ala Arg Leu His Lys Glu Ile Pro Glu Thr Thr Arg Thr Ser
         210                    215                    220

     Gln Met Gln Glu Leu His Lys Ser Leu Arg Ser Leu Asn Asn Phe Cys
     225                    230                    235                    240

     Ser Gln Ile Gly Asp Asp Arg Pro Ile Ser Tyr Cys His Phe Ser Pro
                 245                    250                    255

     Asn Ser Lys Met Leu Ala Thr Ala Cys Trp Ser Gly Leu Cys Lys Leu
                 260                    265                    270

     Trp Ser Val Pro Asp Cys Asn Leu Leu His Thr Leu Arg Gly His Asn
             275                    280                    285

     Thr Asn Val Gly Ala Ile Val Phe His Pro Lys Ser Thr Val Ser Leu
         290                    295                    300

     Asp Pro Lys Asp Val Asn Leu Ala Ser Cys Ala Ala Asp Gly Ser Val
     305                    310                    315                    320

     Lys Leu Trp Ser Leu Asp Arg
                 325
```

```
<210> 1373
<211> 47
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1373
Gly Thr His His Gln Ala Gln Pro Asn Phe Val Phe Phe Leu Xaa Arg
  1               5                   10                  15

Trp Gly Phe Ile Thr Xaa Pro Arg Leu Ile Ser Asn Leu Trp Ala Gln
```

```
                    20                    25                    30
 Ala Ile His Ser Pro Arg Pro Pro Lys Met Leu Gly Leu Gln Ala
              35                    40                    45
```

<210> 1374
<211> 114
<212> PRT
<213> Homo sapiens

<400> 1374

```
 Ala Ala Thr Lys Val Thr Leu Ser Leu Asp Thr Ala Ser Val Leu Ser
  1               5                   10                    15

 Pro Cys Phe Thr Gly His Ser Ile Ser Leu Gln Pro Ser Leu Cys Ala
              20                    25                    30

 Ser Ala Ile Phe Thr His His Gly Ala Glu Val Arg Arg Gly Ser Leu
              35                    40                    45

 Gly Ile Trp Arg Pro Val Lys Asp Gln Ala Trp Arg Ala Gln Gly Pro
          50                    55                    60

 Thr Trp Ala Ser Ser Arg Gly Ala Pro Lys Gly Gln Glu His Pro Lys
 65                    70                    75                    80

 Arg Arg Glu Gly Ser Gln Pro Pro Leu Thr Ala Ser Leu Gln Pro Ser
                  85                    90                    95

 Pro Thr Leu Ile Thr Ile Ser Leu Gln Ala Phe Cys Leu Arg Asp Val
                 100                   105                   110

 Ala Pro
```

<210> 1375
<211> 100
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (92)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE

<222> (93)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1375
Glu Ala Val Asn Glu Gln Leu Ser Ser Glu Arg Ser Asn Leu Ala Gln
 1   5   10   15

Val Ile Arg Gln Glu Phe Glu Asp Arg Leu Ala Ala Ser Glu Glu Glu
                20   25   30

Thr Arg Gln Ala Lys Ala Glu Leu Ala Thr Leu Gln Ala Arg Gln Gln
            35   40   45

Leu Glu Leu Glu Glu Val His Arg Arg Val Lys Thr Ala Leu Ala Arg
        50   55   60

Lys Glu Glu Ala Val Ser Ser Leu Arg Thr Gln His Glu Val Ser Pro
65   70   75 .   80

Cys Gly Gln Pro Cys Trp Thr Ser Gly Leu Gly Xaa Xaa Leu Thr Leu
                85   90   95

Trp Val Cys Cys
            100

<210> 1376
<211> 45
<212> PRT
<213> Homo sapiens

<400> 1376
Ile Arg His Glu Glu Thr Leu Ser Pro Gly His Phe Lys Ser Ile Thr
 1   5   10   15

Gln Lys Lys Thr Leu Ile Phe Thr Phe Lys Ser His Met Gln Leu Leu
                20   25   30

Thr Leu Thr Ser Ala Val Ile Val Leu Ala Ile Ile Pro
            35   40   45

<210> 1377
<211> 230
<212> PRT
<213> Homo sapiens

<220>
<221> SITE

<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (162)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1377
Ser Pro Ser Gly Ala Pro Gly Arg Pro Gly Leu Arg Arg Arg Arg Arg
 1   5   10   15

Arg Arg Arg Arg Arg Ala Asp His Val Xaa Ala Lys Glu Asn Pro Cys
                 20   25   30

Arg Lys Phe Gln Ala Asn Ile Phe Asn Lys Ser Lys Cys Gln Asn Cys
         35   40   45

Phe Lys Pro Arg Glu Ser His Leu Leu Asn Asp Glu Asp Leu Thr Gln
     50   55   60

Ala Lys Pro Ile Tyr Gly Gly Trp Leu Leu Leu Ala Pro Asp Gly Thr
 65   70   75   80

Asp Phe Asp Asn Pro Val His Arg Ser Arg Lys Trp Gln Arg Arg Phe
                 85   90   95

Phe Ile Leu Tyr Glu His Gly Leu Leu Arg Tyr Ala Leu Asp Glu Met
             100   105   110

Pro Thr Thr Leu Pro Gln Gly Thr Ile Asn Met Asn Gln Cys Thr Asp
         115   120   125

Val Val Asp Gly Glu Gly Arg Thr Gly Gln Lys Phe Ser Leu Cys Ile
     130   135   140

Leu Thr Pro Glu Lys Glu His Phe Ile Arg Ala Glu Thr Lys Glu Ile
145   150   155   160

Val Xaa Gly Trp Leu Glu Met Leu Met Val Tyr Pro Arg Thr Asn Lys
                 165   170   175

Gln Asn Gln Lys Lys Lys Arg Lys Val Glu Pro Pro Thr Pro Gln Glu
             180   185   190

Pro Gly Pro Ala Lys Trp Leu Leu Pro Ala Ala Ala Ala Ala Ala Ala
         195   200   205

Ala Ala Ala Ala Ser Pro Val Leu Arg Lys Ser Pro Pro Pro Ser Pro
     210   215   220

His Ser Gly Arg Lys Lys
225   230

<210> 1378
<211> 75
<212> PRT
<213> Homo sapiens

<400> 1378
Gly Lys Gln Lys Pro Leu Ser Ser Ala Phe His Leu Gln Glu Arg Arg
 1   5   10   15

Lys Asn Ser Cys Leu Leu Ser Val Ile Gln Phe Ala Cys Ile Leu Cys
             20   25   30

Ser Cys Thr Asn Pro Tyr Arg Val Asn Leu Leu Ser Thr Ile Tyr Trp
         35   40   45

Cys Leu Ile Glu Asn Asp Cys Leu Pro Ser Phe Leu Val Pro Phe Leu
     50   55   60

Thr Val Leu Lys Tyr Leu Lys Cys Ile Asp Cys
 65   70   75

<210> 1379
<211> 239
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (229)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (231)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (234)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1379
Arg Arg Gly Gln Val Gly Ala Arg Ser Cys Cys Phe Trp Phe Ser Cys
 1   5   10   15

```
Gly Arg Arg Arg Cys Pro Ala Ala Leu Gly Cys Arg Thr Asp Lys Ala
            20              25              30

Trp Ala Thr Ala Pro Gln Lys Pro Thr Gln Leu Asp Ala Gly Ala Gly
            35              40              45

Arg Arg Val Gly Asp Arg Val Ser Glu Gly Ala Ala Arg Ala Gly Gly
    50              55              60

Arg Ala Pro Glu Gly Glu Arg Gly Gly Gly Gly Ser Ala Ala Gly
65              70              75              80

Arg Ala Gly Arg Gly Met Ser Met Pro Asp Ala Met Pro Leu Pro Gly
            85              90              95

Val Gly Glu Glu Leu Lys Gln Ala Lys Glu Ile Glu Asp Ala Glu Lys
            100             105             110

Tyr Ser Phe Met Ala Thr Val Thr Lys Ala Pro Lys Lys Gln Ile Gln
            115             120             125

Phe Ala Asp Asp Met Gln Glu Phe Thr Lys Phe Pro Thr Lys Thr Gly
    130             135             140

Arg Arg Ser Leu Ser Arg Ser Ile Ser Gln Ser Ser Thr Asp Ser Tyr
145             150             155             160

Ser Ser Ala Ala Ser Tyr Thr Asp Ser Ser Asp Asp Glu Val Ser Pro
            165             170             175

Arg Glu Lys Gln Gln Thr Asn Ser Lys Gly Ser Ser Asn Phe Cys Val
            180             185             190

Lys Asn Ile Lys Gln Ala Glu Phe Gly Arg Arg Glu Ile Glu Ile Ala
            195             200             205

Glu Gln Asp Met Ser Ala Leu Ile Ser Leu Arg Lys Arg Ala Gln Gly
    210             215             220

Glu Lys Pro Leu Xaa Gly Xaa Lys Ile Xaa Gly Leu Thr His Tyr
225             230             235
```

<210> 1380
<211> 97
<212> PRT
<213> Homo sapiens

<400> 1380

Ser Cys Ala Asp Ile Val Ser Cys Val Ser Ala Val Ala Val Glu Glu
 1   5   10   15

Leu Lys Leu Gly Lys Met Val Cys Ile Pro Cys Ile Val Ile Pro Val
            20   25   30

Leu Leu Trp Ile Tyr Lys Lys Phe Leu Glu Pro Tyr Ile Tyr Pro Leu
        35   40   45

Val Ser Pro Phe Val Ser Arg Ile Trp Pro Lys Lys Ala Ile Gln Glu
    50   55   60

Ser Asn Asp Thr Asn Lys Gly Lys Val Asn Phe Lys Gly Ala Asp Met
65   70   75   80

Asn Gly Leu Pro Thr Lys Gly Pro Thr Glu Ile Cys Asp Lys Lys Lys
            85   90   95

Asp

<210> 1381
<211> 618
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (507)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (524)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (562)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1381
Pro Arg Val Arg Pro Arg Val Arg Ser Ile Thr Met Ser Val Arg Tyr
 1   5   10   15

Ser Ser Ser Lys His Tyr Ser Ser Ser Arg Ser Gly Gly Gly Gly Gly
            20   25   30

Gly Gly Gly Cys Gly Gly Gly Gly Gly Val Ser Ser Leu Arg Ile Ser

```
              35                      40                      45
    Ser Ser Lys Gly Ser Leu Gly Gly Gly Phe Ser Ser Gly Gly Phe Ser
         50                  55                  60

    Gly Gly Ser Phe Ser Arg Gly Ser Ser Gly Gly Gly Cys Phe Gly Gly
     65                  70                  75                  80

    Ser Ser Gly Gly Tyr Gly Gly Leu Gly Gly Phe Gly Gly Gly Ser Phe
                     85                  90                  95

    Arg Gly Ser Tyr Gly Ser Ser Ser Phe Gly Gly Ser Tyr Gly Gly Ser
                 100             105             110

    Phe Gly Gly Gly Ser Phe Gly Gly Gly Ser Phe Gly Gly Gly Ser Phe
                 115             120             125

    Gly Gly Gly Gly Phe Gly Gly Gly Gly Phe Gly Gly Gly Phe Gly Gly
             130             135             140

    Gly Phe Gly Gly Asp Gly Gly Leu Leu Ser Gly Asn Glu Lys Val Thr
    145             150             155             160

    Met Gln Asn Leu Asn Asp Arg Leu Ala Ser Tyr Leu Asp Lys Val Arg
                     165             170             175

    Ala Leu Glu Glu Ser Asn Tyr Glu Leu Glu Gly Lys Ile Lys Glu Trp
                 180             185             190

    Tyr Glu Lys His Gly Asn Ser His Gln Gly Glu Pro Arg Asp Tyr Ser
                 195             200             205

    Lys Tyr Tyr Lys Thr Ile Asp Asp Leu Lys Asn Gln Ile Leu Asn Leu
         210             215             220

    Thr Thr Asp Asn Ala Asn Ile Leu Leu Gln Ile Asp Asn Ala Arg Leu
    225             230             235             240

    Ala Ala Asp Asp Phe Arg Leu Lys Tyr Glu Asn Glu Val Ala Leu Arg
                 245             250             255

    Gln Ser Val Glu Ala Asp Ile Asn Gly Leu Arg Arg Val Leu Asp Glu
                 260             265             270

    Leu Thr Leu Thr Lys Ala Asp Leu Glu Met Gln Ile Glu Ser Leu Thr
                 275             280             285

    Glu Glu Leu Ala Tyr Leu Lys Lys Asn His Glu Glu Glu Met Lys Asp
         290             295             300

    Leu Arg Asn Val Ser Thr Gly Asp Val Asn Val Glu Met Asn Ala Ala
```

```
305                       310                       315                       320

Pro Gly Val Asp Leu Thr Gln Leu Leu Asn Asn Met Arg Ser Gln Tyr
                325               330               335

Glu Gln Leu Ala Glu Gln Asn Arg Lys Asp Ala Glu Ala Trp Phe Asn
                340               345               350

Glu Lys Ser Lys Glu Leu Thr Thr Glu Ile Asp Asn Asn Ile Glu Gln
                355               360               365

Ile Ser Ser Tyr Lys Ser Glu Ile Thr Glu Leu Arg Arg Asn Val Gln
        370               375               380

Ala Leu Glu Ile Glu Leu Gln Ser Gln Leu Ala Leu Lys Gln Ser Leu
385               390               395               400

Glu Ala Ser Leu Ala Glu Thr Glu Gly Arg Tyr Cys Val Gln Leu Ser
                405               410               415

Gln Ile Gln Ala Gln Ile Ser Ala Leu Glu Glu Gln Leu Gln Gln Ile
                420               425               430

Arg Ala Glu Thr Glu Cys Gln Asn Thr Glu Tyr Gln Gln Leu Leu Asp
                435               440               445

Ile Lys Ile Arg Leu Glu Asn Glu Ile Gln Thr Tyr Arg Ser Leu Leu
        450               455               460

Glu Gly Glu Gly Ser Ser Gly Gly Gly Gly Arg Gly Gly Gly Ser Phe
465               470               475               480

Gly Gly Gly Tyr Gly Gly Gly Ser Ser Gly Gly Gly Ser Ser Gly Gly
                485               490               495

Gly His Gly Gly Ser Ser Gly Gly Gly Tyr Xaa Gly Gly Ser Ser Gly
                500               505               510

Gly Gly Ser Ser Gly Gly Gly Tyr Gly Gly Gly Xaa Pro Ala Ala Ala
                515               520               525

Thr Ala Ala Val Pro Ala Ala Ala Thr Val Val Ala Val Pro Ala Ala
                530               535               540

Ala Ala Ala Ala Thr Gly Ala Ala Leu Arg Arg Arg His Ser Ser Gly
545               550               555               560

Gly Xaa Tyr Gly Gly Gly Thr Ala Pro Ala Ala Asp Thr Ala Ala Ala
                565               570               575

Gln Leu Arg Arg Arg Ile Arg Arg Arg His Ser Ser Gly Gly His Lys
```

```
          580                    585                    590
Ser Ser Ser Ser Gly Ser Val Gly Glu Ser Ser Ser Lys Gly Pro Arg
          595                    600                    605

Ser Ala Glu Thr Ser Trp Gly Asn Gln Asn
          610                    615
```

<210> 1382
<211> 500
<212> PRT
<213> Homo sapiens

<400> 1382

```
Gln Ala Trp Ser Leu Gln Val Ala Leu Ser Pro Phe Phe Phe Pro Ala
  1                   5                  10                  15

Ser Pro Ser Asn Ser Phe Ala Ala Ala Val Pro Gln Leu Leu Phe Pro
                  20                  25                  30

Glu Leu Pro Leu Pro His Val Pro Gly Gln Glu Ser Ala Lys Arg Arg
              35                  40                  45

Ser Ala Arg Arg Phe Leu Ile Met Ser Glu Leu Thr Lys Glu Leu Met
      50                  55                  60

Glu Leu Val Trp Gly Thr Lys Ser Ser Pro Gly Leu Ser Asp Thr Ile
  65                  70                  75                  80

Phe Cys Arg Trp Thr Gln Gly Phe Val Phe Ser Glu Ser Glu Gly Ser
                  85                  90                  95

Ala Leu Glu Gln Phe Glu Gly Gly Pro Cys Ala Val Ile Ala Pro Val
                 100                 105                 110

Gln Ala Phe Leu Leu Lys Lys Leu Leu Phe Ser Ser Glu Lys Ser Ser
                 115                 120                 125

Trp Arg Asp Cys Ser Glu Glu Glu Gln Lys Glu Leu Leu Cys His Thr
              130                 135                 140

Leu Cys Asp Ile Leu Glu Ser Ala Cys Cys Asp His Ser Gly Ser Tyr
145                 150                 155                 160

Cys Leu Val Ser Trp Leu Arg Gly Lys Thr Thr Glu Glu Thr Ala Ser
                 165                 170                 175

Ile Ser Gly Ser Pro Ala Glu Ser Ser Cys Gln Val Glu His Ser Ser
                 180                 185                 190
```

```
Ala Leu Ala Val Glu Glu Leu Gly Phe Glu Arg Phe His Ala Leu Ile
        195             200             205

Gln Lys Arg Ser Phe Arg Ser Leu Pro Glu Leu Lys Asp Ala Val Leu
        210             215             220

Asp Gln Tyr Ser Met Trp Gly Asn Lys Phe Gly Val Leu Leu Phe Leu
225             230             235             240

Tyr Ser Val Leu Leu Thr Lys Gly Ile Glu Asn Ile Lys Asn Glu Ile
            245             250             255

Glu Asp Ala Ser Glu Pro Leu Ile Asp Pro Val Tyr Gly His Gly Ser
            260             265             270

Gln Ser Leu Ile Asn Leu Leu Leu Thr Gly His Ala Val Ser Asn Val
        275             280             285

Trp Asp Gly Asp Arg Glu Cys Ser Gly Met Lys Leu Leu Gly Ile His
        290             295             300

Glu Gln Ala Ala Val Gly Phe Leu Thr Leu Met Glu Ala Leu Arg Tyr
305             310             315             320

Cys Lys Val Gly Ser Tyr Leu Lys Ser Pro Lys Phe Pro Ile Trp Ile
            325             330             335

Val Gly Ser Glu Thr His Leu Thr Val Phe Phe Ala Lys Asp Met Ala
            340             345             350

Leu Val Ala Pro Glu Ala Pro Ser Glu Gln Ala Arg Arg Val Phe Gln
        355             360             365

Thr Tyr Asp Pro Glu Asp Asn Gly Phe Ile Pro Asp Ser Leu Leu Glu
        370             375             380

Asp Val Met Lys Ala Leu Asp Leu Val Ser Asp Pro Glu Tyr Ile Asn
385             390             395             400

Leu Met Lys Asn Lys Leu Asp Pro Glu Gly Leu Gly Ile Ile Leu Leu
            405             410             415

Gly Pro Phe Leu Gln Glu Phe Phe Pro Asp Gln Gly Ser Ser Gly Pro
            420             425             430

Glu Ser Phe Thr Val Tyr His Tyr Asn Gly Leu Lys Gln Ser Asn Tyr
        435             440             445

Asn Glu Lys Val Met Tyr Val Glu Gly Thr Ala Val Val Met Gly Phe
        450             455             460
```

```
Glu Asp Pro Met Leu Gln Thr Asp Asp Thr Pro Ile Lys Arg Cys Leu
465             470         475                 480

Gln Thr Lys Trp Pro Tyr Ile Glu Leu Leu Trp Thr Thr Asp Arg Ser
            485             490                 495

Pro Ser Leu Asn
            500
```

```
<210> 1383
<211> 175
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (133)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1383
Leu Cys Asp Ser Glu Glu Val Ala Trp Glu Leu Gly Glu Ala Gln Arg
  1           5               10                  15

Met Pro Pro Gly Glu Ser Pro His His Gln Cys Ile Thr Ser Asn Val
                20              25                  30

Pro Leu Glu Arg Pro Pro Leu Cys Ser Val Met Phe Gln Lys Leu Leu
            35              40                  45

Met Lys Gln His Val Leu Val Ala Cys Ala Leu Ala Cys His Asp Ser
        50              55                  60

Pro Leu Thr Gly Pro Pro Val Lys Ser Lys Gly Leu Pro Ala Ala Xaa
 65              70                  75                  80

Ser Glu Ala Ser Ala Glu Ser Ser His Pro His Gly Ser Gly Glu Val
                85              90                  95

Ile Thr Leu Ser Arg Arg Ser Asp His Thr Ser Ser Ser Pro Arg Gly
            100             105                 110

Leu Leu Ile Leu Gly Asp Asp Ser Ser Ser Glu His Leu Leu Gln Asp
            115             120                 125
```

Trp Ile Pro Pro Xaa Cys Arg Ser Trp Gly Leu Arg Ala Leu Glu Gln
    130   135   140

Pro Met Leu Glu Ser Cys Leu Pro Pro Ser Ala Thr Val Pro Tyr Pro
145   150   155   160

Gly Thr Val Glu Trp Pro His Gly Gly Asp Gly Arg Pro Ala Glu
                165   170   175

<210> 1384
<211> 57
<212> PRT
<213> Homo sapiens

<400> 1384
Ser Gln Ser Pro Cys Lys Gln Asp Lys Ser Lys Gly Gly Leu Ala Cys
1   5   10   15

Pro Ser Leu Phe His Thr Phe Leu Pro Gly Thr Glu Ser His Gly Glu
            20   25   30

Phe Lys Thr Pro Ser His Ile Leu Leu Leu Lys Leu Val Gln Cys Thr
            35   40   45

Thr Ser Ser Glu Glu Tyr Arg Met Ala
    50   55

<210> 1385
<211> 56
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1385
Val Pro Gly Ser Gln Pro Leu Glu Thr Gly Ala Leu Arg Glu Asp Ser
1   5   10   15

Leu Pro Pro Arg Ile Leu Leu His Pro Trp Phe Glu Ser Val Leu Glu
            20   25   30

Pro Gly Tyr Ile Asp Ser Glu Ile Gly Thr Ser Asp Gln Ile Val Pro
            35   40   45

```
       Glu Tyr Gln Glu Asp Ser Xaa His
            50                  55



<210> 1386
<211> 105
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1386
His Glu Leu Ala Ser Ser Glu Phe Ser His Glu Ala Val Lys Thr His
 1               5                  10                  15

Ile Asp Thr Val Ile Asn Ala Leu Lys Thr Glu Arg Asp Val Ser Val
            20                  25                  30

Arg Gln Arg Ala Ala Asp Leu Xaa Tyr Ala Met Cys Asp Arg Ser Asn
            35                  40                  45

Ala Lys Gln Ile Val Ser Glu Met Leu Arg Tyr Leu Glu Thr Ala Asp
        50                  55                  60

Tyr Ala Ile Arg Glu Glu Ile Val Leu Lys Val Ala Ile Leu Ala Glu
 65                  70                  75                  80

Lys Tyr Ala Val Asp Tyr Ser Trp Tyr Val Asp Thr Ile Leu Asn Leu
                85                  90                  95

Ile Arg Ile Ala Gly Arg Leu Arg Glu
            100                 105



<210> 1387
<211> 67
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1387
Xaa His Arg Gly Asn Gly Xaa Leu Xaa Val Pro Ser Glu Phe Pro Gly
 1   5   10   15

Arg Pro Thr Arg Pro Gly Lys Leu Asp Ile Val Met His Lys Met Gln
            20   25   30

Glu Lys Val Gln Ser Ile Asn Tyr Asn Pro Phe Asp Gln Lys Leu Tyr
        35   40   45

Val Tyr Asn Asp Gly Tyr Leu Leu Asn Tyr Asp Leu Ser Val Leu Gln
    50   55   60

Lys Pro Gln
 65

<210> 1388
<211> 345
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (297) .
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1388
Val Trp Met Thr Ser Thr Ser Ser Pro Val Pro Arg Ala His Cys Ser
 1   5   10   15

Asn Leu Thr Cys Asn Asn Ser Lys Asn Lys Thr Leu Val Thr Gln Asn
            20   25   30

Ser Gly Val Glu Ala Leu Ile His Ala Ile Leu Arg Ala Gly Asp Lys
        35   40   45

Asp Asp Ile Thr Glu Pro Ala Val Cys Ala Leu Arg His Leu Thr Ser
    50   55   60

Arg His Pro Glu Ala Glu Met Ala Gln Asn Ser Val Arg Leu Asn Tyr

```
        65                    70                    75                    80

    Gly Ile Pro Ala Ile Val Lys Leu Leu Asn Gln Pro Asn Gln Trp Pro
                    85                    90                    95

    Leu Val Lys Ala Thr Ile Gly Leu Ile Arg Asn Leu Ala Leu Cys Pro
                   100                   105                   110

    Ala Asn His Ala Pro Leu Gln Glu Ala Ala Val Ile Pro Arg Leu Val
                   115                   120                   125

    Gln Leu Leu Val Lys Ala His Gln Asp Ala Gln Arg His Val Ala Ala
       130                   135                   140

    Gly Thr Gln Gln Pro Tyr Thr Asp Gly Val Arg Met Glu Glu Ile Val
    145                   150                   155                   160

    Glu Gly Cys Thr Gly Ala Leu His Ile Leu Ala Arg Asp Pro Met Asn
                   165                   170                   175

    Arg Met Glu Ile Phe Arg Leu Asn Thr Ile Pro Leu Phe Val Gln Leu
                   180                   185                   190

    Leu Tyr Ser Ser Val Glu Asn Ile Gln Arg Val Ala Ala Gly Val Leu
                   195                   200                   205

    Cys Glu Leu Ala Gln Asp Lys Glu Ala Ala Asp Ala Ile Asp Ala Glu
       210                   215                   220

    Gly Ala Ser Ala Pro Leu Met Glu Leu Leu His Ser Arg Asn Glu Gly
    225                   230                   235                   240

    Thr Ala Thr Tyr Ala Ala Ala Val Leu Phe Arg Ile Ser Glu Asp Lys
                   245                   250                   255

    Asn Pro Asp Tyr Arg Lys Arg Val Ser Val Glu Leu Thr Asn Ser Leu
                   260                   265                   270

    Phe Lys His Asp Pro Ala Ala Trp Glu Ala Ala Gln Ser Met Ile Pro
                   275                   280                   285

    Ile Asn Glu Pro Tyr Gly Asp Asp Xaa Asp Ala Thr Tyr Arg Pro Met
       290                   295                   300

    Tyr Ser Ser Asp Val Pro Leu Asp Pro Leu Glu Met His Met Asp Met
    305                   310                   315                   320

    Asp Gly Asp Tyr Pro Ile Asp Thr Tyr Ser Asp Gly Leu Arg Pro Pro
                   325                   330                   335

    Tyr Pro Thr Ala Asp His Met Leu Ala
```

340   345

<210> 1389
<211> 64
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1389
Ser Leu Ile Cys Tyr Val Gln Ser Leu Lys Ala Thr Thr His Phe Phe
  1   5   10   15

Xaa Lys Val Asp Ala Phe Ser Ala Val Leu Glu Ser Val Phe Cys Phe
                 20   25   30

Trp Gln Glu Ser Cys Lys Leu Cys Ile Leu Lys Gln Met Gln Lys Val
             35   40   45

Val Leu Cys Lys Thr Phe Val Phe Cys Leu Ser Gln Ile Asn Ile Leu
        50   55   60

<210> 1390
<211> 371
<212> PRT
<213> Homo sapiens

<400> 1390
Pro Pro Arg Ala Leu Gly Ser Val Ala Met Glu Asn Gln Val Leu Thr
  1   5   10   15

Pro His Val Tyr Trp Ala Gln Arg His Arg Glu Leu Tyr Leu Arg Val
                 20   25   30

Glu Leu Ser Asp Val Gln Asn Pro Ala Ile Ser Ile Thr Glu Asn Val
             35   40   45

Leu His Phe Lys Ala Gln Gly His Gly Ala Lys Gly Asp Asn Val Tyr
        50   55   60

Glu Phe His Leu Glu Phe Leu Asp Leu Val Lys Pro Glu Pro Val Tyr

```
            65                    70                    75                    80

        Lys Leu Thr Gln Arg Gln Val Asn Ile Thr Val Gln Lys Lys Val Ser
                        85                    90                    95

        Gln Trp Trp Glu Arg Leu Thr Lys Gln Glu Lys Arg Pro Leu Phe Leu
                       100                   105                   110

        Ala Pro Asp Phe Asp Arg Trp Leu Asp Glu Ser Asp Ala Glu Met Glu
                       115                   120                   125

        Leu Arg Ala Lys Glu Glu Glu Arg Leu Asn Lys Leu Arg Leu Glu Ser
                130                   135                   140

        Glu Gly Ser Pro Glu Thr Leu Thr Asn Leu Arg Lys Gly Tyr Leu Phe
        145                   150                   155                   160

        Met Tyr Asn Leu Val Gln Phe Leu Gly Phe Ser Trp Ile Phe Val Asn
                       165                   170                   175

        Leu Thr Val Arg Phe Cys Ile Leu Gly Lys Glu Ser Phe Tyr Asp Thr
                       180                   185                   190

        Phe His Thr Val Ala Asp Met Met Tyr Phe Cys Gln Met Leu Ala Val
                       195                   200                   205

        Val Glu Thr Ile Asn Ala Ala Ile Gly Val Thr Thr Ser Pro Val Leu
                210                   215                   220

        Pro Ser Leu Ile Gln Leu Leu Gly Arg Asn Phe Ile Leu Phe Ile Ile
        225                   230                   235                   240

        Phe Gly Thr Met Glu Glu Met Gln Asn Lys Ala Val Val Phe Phe Val
                       245                   250                   255

        Phe Tyr Leu Trp Ser Ala Ile Glu Ile Phe Arg Tyr Ser Phe Tyr Met
                       260                   265                   270

        Leu Thr Cys Ile Asp Met Asp Trp Lys Val Leu Thr Trp Leu Arg Tyr
                       275                   280                   285

        Thr Leu Trp Ile Pro Leu Tyr Pro Leu Gly Cys Leu Ala Glu Ala Val
                290                   295                   300

        Ser Val Ile Gln Ser Ile Pro Ile Phe Asn Glu Thr Gly Arg Phe Ser
        305                   310                   315                   320

        Phe Thr Leu Pro Tyr Pro Val Lys Ile Lys Val Arg Phe Ser Phe Phe
                       325                   330                   335

        Leu Gln Ile Tyr Leu Ile Met Ile Phe Leu Gly Leu Tyr Ile Asn Phe
```

```
                340                    345                    350

    Arg His Leu Tyr Lys Gln Arg Arg Arg Arg Tyr Gly Gln Lys Lys Lys
            355                    360                    365

    Lys Ile His
            370




    <210> 1391
    <211> 365
    <212> PRT
    <213> Homo sapiens

    <220>
    <221> SITE
    <222> (28)
    <223> Xaa equals any of the naturally occurring L-amino acids

    <400> 1391
    Ala Glu Val Asn Thr Val Lys Tyr Leu Lys Pro Ser Thr Ser Gln Ile
     1               5                  10                     15


    Met Lys Lys Leu Leu Leu Lys Phe Ser Ser Gln Xaa Lys Lys Lys Lys
                20                  25                     30


    Ile Lys Arg Glu Ile Lys Ile Leu Glu Asn Leu Arg Gly Gly Pro Asn
            35                  40                     45


    Ile Ile Thr Leu Ala Asp Ile Val Lys Asp Pro Val Ser Arg Thr Pro
        50                  55                  60


    Ala Leu Val Phe Glu His Val Asn Asn Thr Asp Phe Lys Gln Leu Tyr
    65                  70                  75                     80


    Gln Thr Leu Thr Asp Tyr Asp Ile Arg Phe Tyr Met Tyr Glu Ile Leu
                    85                  90                     95


    Lys Ala Leu Asp Tyr Cys His Ser Met Gly Ile Met His Arg Asp Val
                100                 105                 110


    Lys Pro His Asn Val Met Ile Asp His Glu His Arg Lys Leu Arg Leu
                115                 120                 125


    Ile Asp Trp Gly Leu Ala Glu Phe Tyr His Pro Gly Gln Glu Tyr Asn
            130                 135                 140


    Val Arg Val Ala Ser Arg Tyr Phe Lys Gly Pro Glu Leu Leu Val Asp
    145                 150                 155                 160
```

```
Tyr Gln Met Tyr Asp Tyr Ser Leu Asp Met Trp Ser Leu Gly Cys Met
            165             170             175

Leu Ala Ser Met Ile Phe Arg Lys Glu Pro Phe Phe His Gly His Asp
            180             185             190

Asn Tyr Asp Gln Leu Val Arg Ile Ala Lys Val Leu Gly Thr Glu Asp
            195             200             205

Leu Tyr Asp Tyr Ile Asp Lys Tyr Asn Ile Glu Leu Asp Pro Arg Phe
    210             215             220

Asn Asp Ile Leu Gly Arg His Ser Arg Lys Arg Trp Glu Arg Phe Val
225             230             235             240

His Ser Glu Asn Gln His Leu Val Ser Pro Glu Ala Leu Asp Phe Leu
            245             250             255

Asp Lys Leu Leu Arg Tyr Asp His Gln Ser Arg Leu Thr Ala Arg Glu
            260             265             270

Ala Met Glu His Pro Tyr Phe Tyr Thr Val Val Lys Asp Gln Ala Arg
            275             280             285

Met Gly Ser Ser Ser Met Pro Gly Gly Ser Thr Pro Val Ser Ser Ala
    290             295             300

Asn Met Met Ser Gly Ile Ser Ser Val Pro Thr Pro Ser Pro Leu Gly
305             310             315             320

Pro Leu Ala Gly Ser Pro Val Ile Ala Ala Ala Asn Pro Leu Gly Met
            325             330             335

Pro Val Gln Leu Pro Leu Ala Leu Ser Ser Asn Gly Pro Ile Cys Leu
            340             345             350

Leu Met Pro Glu Gln Arg Trp Gly Ser Pro Pro Ser Pro
            355             360             365
```

<210> 1392
<211> 276
<212> PRT
<213> Homo sapiens

<400> 1392
```
Thr Met Ala Ala Ser Asp Thr Glu Arg Asp Gly Leu Ala Pro Glu Lys
  1             5               10              15

Thr Ser Pro Asp Arg Asp Lys Lys Lys Glu Gln Ser Glu Val Ser Val
```

```
              20                      25                      30

  Ser Pro Arg Ala Ser Lys His His Tyr Ser Arg Ser Arg Ser Arg Ser
          35                      40                      45

  Arg Glu Arg Lys Arg Lys Ser Asp Asn Glu Gly Arg Lys His Arg Ser
      50                      55                      60

  Arg Ser Arg Ser Lys Glu Gly Arg Arg His Glu Ser Lys Asp Lys Ser
  65                      70                      75                      80

  Ser Lys Lys His Lys Ser Glu Glu His Asn Asp Lys Glu His Ser Ser
              85                      90                      95

  Asp Lys Gly Arg Glu Arg Leu Asn Ser Ser Glu Asn Gly Glu Asp Arg
              100                     105                     110

  His Lys Arg Lys Glu Arg Lys Ser Ser Arg Gly Arg Ser His Ser Arg
              115                     120                     125

  Ser Arg Ser Arg Glu Arg Arg His Arg Ser Arg Ser Arg Glu Arg Lys
      130                     135                     140

  Lys Ser Arg Ser Arg Ser Arg Glu Arg Lys Lys Ser Arg Ser Arg Ser
  145                     150                     155                     160

  Arg Glu Arg Lys Lys Ser Arg Ser Arg Ser Arg Glu Arg Lys Arg Arg
              165                     170                     175

  Ile Arg Ser Arg Ser Arg Ser Arg Ser Arg His Arg His Arg Thr Arg
              180                     185                     190

  Ser Arg Ser Arg Thr Arg Ser Arg Ser Arg Asp Arg Lys Lys Arg Ile
              195                     200                     205

  Glu Lys Pro Arg Arg Phe Ser Arg Ser Leu Ser Arg Thr Pro Ser Pro
      210                     215                     220

  Pro Pro Phe Arg Gly Arg Asn Thr Ala Met Asp Ala Gln Glu Ala Leu
  225                     230                     235                     240

  Ala Arg Arg Glu Arg Pro Gly Val Ser Leu Ile Val Cys Pro Gly Trp
              245                     250                     255

  Val Thr Gln Cys Asn Leu Met Leu Leu Pro Leu Gly Thr Gln Pro Asp
              260                     265                     270

  Arg Lys Leu Gln
              275
```

```
<210> 1393
<211> 180
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (139)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (172)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (180)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1393
Ala Arg Arg Xaa Val Val Ile Thr Ser Lys Ser Gly Glu Ile Leu Tyr
 1               5                  10                  15

Arg Ile Ser Pro Trp Ala Lys Tyr Val Val Arg Glu Gly Asp Asn Val
            20                  25                  30

Asn Tyr Asp Trp Ile His Trp Asp Pro Glu His Ser Tyr Glu Phe Lys
         35                  40                  45

His Ser Arg Pro Lys Lys Pro Arg Ser Leu Arg Ile Tyr Glu Ser His
      50                  55                  60

Val Gly Ile Ser Ser His Glu Gly Lys Val Ala Ser Tyr Lys His Phe
 65                  70                  75                  80

Thr Cys Asn Val Leu Pro Arg Ile Lys Gly Leu Gly Tyr Asn Cys Ile
               85                  90                  95

Gln Leu Met Ala Ile Met Glu His Ala Tyr Tyr Ala Ser Phe Gly Tyr
              100                 105                 110

Gln Ile Thr Ser Phe Phe Ala Ala Ser Ser Arg Tyr Gly Thr Pro Glu
              115                 120                 125
```

```
Glu Leu Gln Glu Leu Val Asp Thr Ala His Xaa Met Gly Ile Ile Val
    130             135             140

Leu Leu Asp Val Val Gln Ala His Ala Ser Lys Asn Ser Ser Arg Trp
145             150             155             160

Asp Trp Asn Met Val Trp Met Gly Asp Arg Phe Xaa Val Asn Phe Pro
                165             170             175

Phe Leu Gly Xaa
            180
```

```
<210> 1394
<211> 162
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1394
Ile Leu Thr Tyr Lys Glu Thr Gly Pro Gln Thr Gly Asn Ser Leu Val
  1             5               10              15

Gln Ala Ser Ala Arg Arg Lys Asp Thr Met Thr Ala Pro Cys Trp Ala
            20              25              30

Gln Pro Gly Ser Leu Ala Lys Cys Leu Leu Glu Ala Val Pro Ala Arg
        35              40              45

Gly Leu Gln Gln Gly Asp Ser Leu Pro Ser Gly His Tyr Gln Tyr Xaa
    50              55              60

Leu Tyr Leu Glu Val Gly Lys Arg Ser Pro Leu Arg Gln Gln Asp Asn
 65             70              75              80

Gly Gln Phe Arg Glu Gly Glu Gly Ser Lys Arg Phe Arg Gly His Arg
            85              90              95

Ser Gln Arg Thr Pro Pro Arg Pro Thr Ala Gly Ser Ala Trp Lys Ile
            100             105             110

His Leu Leu Gly Thr Phe Trp Gln Pro Asp Gly Ser Asn Ser Pro Leu
        115             120             125

Gly Leu Ile Pro Ser Ser Lys Ser Trp Leu Gln Met Ser Leu Ser Ser
    130             135             140
```

```
Pro Tyr Trp Arg Ala Pro Pro Asp Ser Trp Ala Gln Phe Ile Ser Ser
145                 150             155                 160

Pro Phe
```

<210> 1395
<211> 416
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (412)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (413)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1395

```
Gln Leu Asp Gly Val Gly Leu Glu Ser Arg Ser Pro Gly Cys Ser Thr
 1               5               10                  15

Trp Glu Lys Ala Asp Arg Val Arg Gly Pro Val Ala Gln Arg Ala Val
            20              25              30

Ala Ser Gly Ser Gly Lys Trp Arg Gln Glu Pro Ser Leu His Phe Ala
        35              40              45

Met Ser Phe Leu Ile Asp Ser Ser Ile Met Ile Thr Ser Gln Ile Leu
    50              55              60

Phe Phe Gly Phe Gly Trp Leu Phe Phe Met Arg Gln Leu Phe Lys Asp
65              70              75                  80

Tyr Glu Ile Arg Gln Tyr Val Val Gln Val Ile Phe Ser Val Thr Phe
            85              90                  95

Ala Phe Ser Cys Thr Met Phe Glu Leu Ile Ile Phe Glu Ile Leu Gly
            100             105             110

Val Leu Asn Ser Ser Ser Arg Tyr Phe His Trp Lys Met Asn Leu Cys
            115             120             125

Val Ile Leu Leu Ile Leu Val Phe Met Val Pro Phe Tyr Ile Gly Tyr
    130             135             140
```

```
Phe Ile Val Ser Asn Ile Arg Leu Leu His Lys Gln Arg Leu Leu Phe
145             150             155             160

Ser Cys Leu Leu Trp Leu Thr Phe Met Tyr Phe Phe Trp Lys Leu Gly
            165             170             175

Asp Pro Phe Pro Ile Leu Ser Pro Lys His Gly Ile Leu Ser Ile Glu
            180             185             190

Gln Leu Ile Ser Arg Val Gly Val Ile Gly Val Thr Leu Met Ala Leu
        195             200             205

Leu Ser Gly Phe Gly Ala Val Asn Cys Pro Tyr Thr Tyr Met Ser Tyr
    210             215             220

Phe Leu Arg Asn Val Thr Asp Thr Asp Ile Leu Ala Leu Glu Arg Arg
225             230             235             240

Leu Leu Gln Thr Met Asp Met Ile Ile Ser Lys Lys Lys Arg Met Ala
            245             250             255

Met Ala Arg Arg Thr Met Phe Gln Lys Gly Glu Val His Asn Lys Pro
            260             265             270

Ser Gly Phe Trp Gly Met Ile Lys Ser Val Thr Thr Ser Ala Ser Gly
    275             280             285

Ser Glu Asn Leu Thr Leu Ile Gln Gln Glu Val Asp Ala Leu Glu Glu
    290             295             300

Leu Ser Arg Gln Leu Phe Leu Glu Thr Ala Asp Leu Tyr Ala Thr Lys
305             310             315             320

Glu Arg Ile Glu Tyr Ser Lys Thr Phe Lys Gly Lys Tyr Phe Asn Phe
            325             330             335

Leu Gly Tyr Phe Phe Ser Ile Tyr Cys Val Trp Lys Ile Phe Met Ala
            340             345             350

Thr Ile Asn Ile Val Phe Asp Arg Val Gly Lys Thr Asp Pro Val Thr
            355             360             365

Arg Gly Ile Glu Ile Thr Val Asn Tyr Leu Gly Ile Gln Phe Asp Val
    370             375             380

Lys Phe Trp Ser Gln His Ile Ser Phe Ile Leu Val Gly Ile Ile Ile
385             390             395             400

Val Thr Ser Ile Arg Gly Leu Leu Ile Thr Leu Xaa Xaa Val Ile Leu
            405             410             415
```

<210> 1396
<211> 71
<212> PRT
<213> Homo sapiens

<400> 1396
Ile Ile Tyr Val His Ile Val Gln Gln Lys Tyr Asn Val Asn His Asn
1   5   10   15

Ile Ile Phe Asn Phe Leu Val Ala Ile Leu Lys Lys Lys Gln Ala Lys
                20   25   30

Leu Ile Leu Ile Thr Val Tyr Val Thr Gln Tyr Ile Lys Asn Ile Ile
            35   40   45

Ser Thr Cys Asn Gln Tyr Lys Arg Leu Leu Met Lys His Leu Ile Phe
        50   55   60

Phe Phe Phe His Thr Lys Ser
65   70

<210> 1397
<211> 204
<212> PRT
<213> Homo sapiens

<400> 1397
Ala Pro Arg Leu Val Val Thr Cys Arg His Val Ser Pro Arg Glu Ala
1   5   10   15

Ala Arg Val Leu Val Arg Ser Thr Thr Pro Lys Ser Val Ala Ile Trp
                20   25   30

Gly Arg Val Val Phe Ala Thr Gln Glu Thr Cys Pro Tyr Asp Ile Ala
            35   40   45

Val Val Ser Leu Glu Glu Asp Leu Asp Asp Val Pro Ile Pro Val Pro
        50   55   60

Ala Glu His Phe His Glu Gly Glu Ala Val Ser Val Val Gly Phe Gly
65   70   75   80

Val Phe Gly Gln Ser Cys Gly Pro Ser Val Thr Ser Gly Ile Leu Ser

```
                    85                      90                      95

Ala Val Val Gln Val Asn Gly Thr Pro Val Met Leu Gln Thr Thr Cys
            100                 105                 110

Ala Val His Ser Gly Ser Ser Gly Gly Pro Leu Phe Ser Asn His Ser
            115                 120                 125

Gly Asn Leu Leu Gly Ile Ile Thr Ser Asn Thr Arg Asp Asn Asn Thr
    130                 135                 140

Gly Ala Thr Tyr Pro His Leu Asn Phe Ser Ile Pro Ile Thr Val Leu
145                 150                 155                 160

Gln Pro Ala Leu Gln Gln Tyr Ser Gln Thr Gln Asp Leu Gly Gly Leu
                165                 170                 175

Arg Glu Leu Asp Arg Ala Ala Glu Pro Val Arg Val Val Trp Arg Leu
            180                 185                 190

Gln Arg Pro Leu Ala Glu Ala Pro Arg Ser Lys Leu
            195                 200
```

```
<210> 1398
<211> 69
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1398
Val Phe Ile Val Phe Asn Ser Val Thr Ser Arg Phe Phe Pro Lys Lys
  1               5                  10                  15

Phe Leu Xaa Ile Lys Ser Arg Leu Phe Arg Lys Tyr Leu Pro Val Leu
                20                  25                  30

His Phe Asn Phe Thr Asn Gln Thr Thr Ala Ile Gln Pro Ile Lys Gln
            35                  40                  45

Gln Lys Gln Ser Lys Glu Arg Asp Leu Asp Ile Gly Ile Lys Glu Ser
    50                  55                  60

Phe His Phe Ile Ile
    65
```

```
<210> 1399
<211> 238
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (57)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1399
Glu Ala Glu Ala Ala Glu Arg Gly Pro Leu His Ala Gly Lys Gln Pro
  1               5                  10                 15

Arg Xaa Pro Gly Gly Gly Ala Arg Trp Pro Cys Cys Ser Ala Phe Lys
            20                  25                  30

Glu Gln Gln Phe Val Ile Ala Gly Val Leu Val Glu Asp Ser Asn Asn
        35                  40                  45

His His Leu Met Leu Glu Ala Ser Xaa Trp Ala Thr Ile Glu Gly Leu
    50                  55                  60

Val Glu Leu Leu Gln Pro Phe Lys Gln Val Ala Glu Met Leu Ser Ala
 65                  70                  75                  80

Ser Arg Tyr Pro Thr Ile Ser Met Val Lys Pro Leu Leu His Met Leu
             85                  90                  95

Leu Asn Thr Thr Leu Asn Ile Lys Glu Thr Asp Ser Lys Glu Leu Ser
            100                 105                 110

Met Ala Lys Glu Val Ile Ala Lys Glu Leu Ser Lys Thr Tyr Gln Glu
            115                 120                 125

Thr Pro Glu Ile Asp Met Phe Leu Asn Val Ala Thr Phe Leu Asp Pro
    130                 135                 140

Arg Tyr Lys Arg Leu Pro Phe Leu Ser Ala Phe Glu Arg Gln Gln Val
145                 150                 155                 160

Glu Asn Arg Val Val Glu Glu Ala Lys Gly Cys Trp Thr Arg Ser Lys
                165                 170                 175
```

```
Thr Ala Ala Thr Gly Arg Leu Arg Thr Arg Ser Ser Arg Cys Pro Arg
            180             185             190

Ser Leu Pro Ser Arg Ser Ser Cys Gly His Pro Arg Arg Arg Pro Pro
            195             200             205

Ala Ser Ser Thr Thr Cys Trp Pro Arg Ser Ser Ala Arg Gln Ala Ala
    210             215             220

Trp Arg Thr Arg Lys Ser Gly Met Pro Arg Trp Trp Arg Ser
225             230             235
```

```
<210> 1400
<211> 83
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (83)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1400
Phe Leu Lys Leu Cys Gly Leu Lys Trp Gln Val Ala Ser Thr Asp Phe
  1             5             10              15

Thr Arg Phe Lys Leu Ile Phe Lys Ser Asn His Trp Arg Asn Arg Tyr
            20              25              30

Thr Phe Val Cys Arg Ile Phe Thr Ser Tyr Asn Ser Thr Arg Lys Val
            35              40              45

Phe Ser Phe Pro Ala Asp Ala Gly Thr Pro Thr Gly Thr Leu Gln Lys
    50              55              60

Asp Ala Ser Pro Asp Cys Thr Asp Gly Arg Trp Lys His Gly Pro Val
65              70              75              80

Cys Gly Xaa
```

```
<210> 1401
<211> 79
<212> PRT
<213> Homo sapiens

<400> 1401
```

```
Gly Ala Leu Cys Ala Val Trp Ala Arg Ala Gly Arg Pro Gly Pro Gln
 1               5                  10                  15

Asp Val Arg Cys Pro Leu Arg Arg Ala Gly Ala Cys Gly Glu Thr Arg
             20                  25                  30

Ala Thr Cys Glu Arg Gly Pro Glu Thr Phe Cys Thr Arg Glu Leu Arg
             35                  40                  45

Gly Leu Ser Asn Pro Ala Ser Val Gly Asn Val Ser Glu Thr Gln Gly
         50                  55                  60

Glu Trp Pro Gln Pro Phe Val Thr Cys Ser Pro Ala Cys Pro Lys
 65                  70                  75
```

```
<210> 1402
<211> 222
<212> PRT
<213> Homo sapiens

<400> 1402
Pro Ala Asn Gly Leu Leu Phe Gly Gly Leu Arg Ser Arg Glu Leu Arg
 1               5                  10                  15

Val Phe Ala Arg Leu Ser Thr Phe Arg Lys Ile Arg Ala Gly Val Trp
             20                  25                  30

Glu Val Pro His Ser Thr Gly Gln Arg Pro Leu Asp Ser Arg Gly Asn
             35                  40                  45

Leu Gln Leu Trp Val Arg Gly His Leu Ala Leu Val Phe Ala Leu Tyr
         50                  55                  60

Arg Ser Cys Gly Pro Arg Gly Ala Ser Gly Glu Asp Val Ser Gly Arg
 65                  70                  75                  80

Gly Phe Pro Ala Phe Cys Leu Gly Gln Trp Gly Cys Ser Cys Leu Ser
                 85                  90                  95

Phe Ser Pro Thr Pro Trp Thr Val Leu Gly Cys Trp Cys Thr Trp Leu
             100                 105                 110

Ala His Gly Gly Gln Arg Ala Glu Asn Ala Thr Ala Trp Leu Leu Val
             115                 120                 125

Pro Phe Asp Gln Glu Thr Gln Glu Glu Thr Pro Gln Ser Ala Glu Arg
             130                 135                 140

Pro Pro Gly Ser Leu Ala His Ser Arg Ser Gly Arg Asp Gly Arg Val
```

```
            145                 150                 155                 160

        Ser Ser Leu Ser Ser Gly Ile Arg Lys Gly Met Val Ser Thr Pro His
                        165                 170                 175

        Cys Gly Gly Phe Arg Gln Gly Ser Tyr Cys Leu Leu Cys Leu Gly Phe
                        180                 185                 190

        Pro Ile Trp Lys Met Gly Ala Gly Val Leu Thr Tyr Leu Arg Trp Asn
                        195                 200                 205

        Gly Glu Gln Gly Thr Cys Arg Ser Pro Ser Glu Asn Val Met
            210                 215                 220
```

<210> 1403
<211> 139
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (126)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1403

```
        Arg Ala Thr Leu Glu His Pro Ala Leu Val Pro Leu Gln Pro Ala Glu
        1                   5                   10                  15

        Met Val Glu Leu Met Phe Pro Leu Leu Leu Leu Leu Pro Phe Leu
                        20                  25                  30

        Leu Tyr Met Ala Ala Pro Gln Ile Arg Lys Met Leu Ser Ser Gly Val
                        35                  40                  45

        Cys Thr Ser Thr Val Gln Leu Pro Gly Lys Val Val Val Val Thr Gly
                50                  55                  60

        Ala Asn Thr Gly Ile Gly Lys Glu Thr Ala Lys Glu Leu Ala Gln Arg
            65                  70                  75                  80

        Gly Ala Arg Val Tyr Leu Ala Cys Arg Asp Val Glu Lys Gly Glu Leu
                        85                  90                  95

        Val Ala Lys Glu Ile Gln Thr Thr Thr Gly Asn Gln Gln Val Leu Val
                        100                 105                 110

        Arg Lys Leu Asp Leu Ser Asp Thr Lys Ser Ile Arg Ala Xaa Ala Lys
                        115                 120                 125
```

Gly Phe Leu Ala Glu Glu Lys His Leu His Val
    130   135

<210> 1404
<211> 285
<212> PRT
<213> Homo sapiens

<400> 1404
Glu Glu Gln His Ser Met Leu Gly Ser Gly Phe Lys Ala Glu Arg Leu
 1   5   10   15

Arg Val Asn Leu Arg Leu Val Ile Asn Arg Leu Lys Leu Leu Glu Lys
            20   25   30

Lys Lys Thr Glu Leu Ala Gln Lys Ala Arg Lys Glu Ile Ala Asp Tyr
            35   40   45

Leu Ala Ala Gly Lys Asp Glu Arg Ala Arg Ile Arg Val Glu His Ile
        50   55   60

Ile Arg Glu Asp Tyr Leu Val Glu Ala Met Glu Ile Leu Glu Leu Tyr
 65   70   75   80

Cys Asp Leu Leu Leu Ala Arg Phe Gly Leu Ile Gln Ser Met Lys Glu
                85   90   95

Leu Asp Ser Gly Leu Ala Glu Ser Val Ser Thr Leu Ile Trp Ala Ala
            100   105   110

Pro Arg Leu Gln Ser Glu Val Ala Glu Leu Lys Ile Val Ala Asp Gln
        115   120   125

Leu Cys Ala Lys Tyr Ser Lys Glu Tyr Gly Lys Leu Cys Arg Thr Asn
    130   135   140

Gln Ile Gly Thr Val Asn Asp Arg Leu Met His Lys Leu Ser Val Glu
145   150   155   160

Ala Pro Pro Lys Ile Leu Val Glu Arg Tyr Leu Ile Glu Ile Ala Lys
                165   170   175

Asn Tyr Asn Val Pro Tyr Glu Pro Asp Ser Val Val Met Ala Glu Ala
            180   185   190

Pro Pro Gly Val Glu Thr Asp Leu Ile Asp Val Gly Phe Thr Asp Asp
        195   200   205

Val Lys Lys Gly Gly Pro Gly Arg Gly Gly Ser Gly Gly Phe Thr Ala

```
          210                     215                     220

Pro Val Gly Gly Pro Asp Gly Thr Val Pro Asp Ala His Ala His Ala
225                 230                 235                 240

Tyr Ala Ile Cys Lys Tyr Ala Phe Leu Ile Ser Thr Ala Lys Gly Thr
                245                 250                 255

Ile Arg Phe Gln Trp Thr Ala Asn Gly Asp Leu Ser Gly Leu Ser Gln
            260                 265                 270

Tyr Ser Ser Thr Ser Asp Thr Ser Asn Ser Pro Ile Val
        275                 280                 285



<210> 1405
<211> 196
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (113)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1405
Arg Val Thr Phe Asn Asn Leu Ser Ile Ser Gly Glu Leu Glu Ala Val
  1               5                   10                  15

Gln Asn Met Val Ser Thr Val Glu Cys Ala Leu Lys His Val Ser Asp
                20                  25                  30

Trp Leu Asp Glu Thr Asn Lys Gly Thr Lys Thr Glu Gly Glu Thr Glu
            35                  40                  45

Val Lys Lys Asp Glu Ala Gly Glu Asn Tyr Ser Lys Asp Gln Gly Gly
        50                  55                  60

Arg Thr Leu Cys Gly Val Met Arg Ile Gly Leu Val Ala Lys Gly Leu
 65                 70                  75                  80

Leu Ile Lys Asp Asp Met Asp Leu Glu Leu Val Leu Met Cys Lys Asp
                85                  90                  95

Lys Pro Thr Glu Thr Leu Leu Asn Thr Val Lys Asp Asn Leu Pro Ile
            100                 105                 110

Xaa Ile Gln Lys Leu Thr Glu Glu Lys Tyr Gln Val Glu Gln Cys Val
            115                 120                 125
```

```
Asn Glu Ala Ser Ile Ile Ile Arg Asn Thr Lys Glu Pro Thr Leu Thr
    130                 135                 140

Leu Lys Val Ile Leu Thr Ser Pro Leu Ile Arg Asp Glu Leu Glu Lys
145                 150                 155                 160

Lys Asp Gly Glu Asn Val Ser Met Lys Asp Pro Pro Asp Leu Leu Asp
                165                 170                 175

Arg Gln Lys Cys Leu Asn Ala Leu Ala Ser Leu Arg His Ala Lys Trp
            180                 185                 190

Phe Gln Ala Arg
            195
```

```
<210> 1406
<211> 329
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (312)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1406
Pro Pro Arg Pro Leu Ser Ala Arg Lys Leu Trp Pro Pro Leu Pro Pro
  1               5                  10                  15

Pro Pro Thr Arg Thr Pro Ala Glu Pro Pro Arg Pro Arg Gly Arg Asn
            20                  25                  30

Pro Ala Ser Asn Asn Ser Asn Ser Leu Asn Val Asn Asn Gly Val Pro
            35                  40                  45

Gly Gly Ala Ala Ala Ala Ser Ser Ala Thr Val Ala Ala Ala Ser Ala
    50                  55                  60

Thr Thr Ala Ala Ser Ser Ser Leu Ala Thr Pro Glu Leu Gly Ser Ser
65                  70                  75                  80

Leu Lys Lys Lys Lys Arg Leu Ser Gln Ser Asp Glu Asp Val Ile Arg
                85                  90                  95

Leu Ile Gly Gln His Leu Asn Gly Leu Gly Leu Asn Gln Thr Val Asp
            100                 105                 110

Leu Leu Met Gln Glu Ser Gly Cys Arg Leu Glu His Pro Ser Ala Thr
            115                 120                 125
```

```
Lys Phe Arg Asn His Val Met Glu Gly Asp Trp Asp Lys Ala Glu Asn
    130             135         140
Asp Leu Asn Glu Leu Lys Pro Leu Val His Ser Pro His Ala Ile Val
145             150             155             160
Val Arg Gly Ala Leu Glu Ile Ser Gln Thr Leu Leu Gly Ile Ile Val
            165             170             175
Arg Met Lys Phe Leu Leu Leu Gln Gln Lys Tyr Leu Glu Tyr Leu Glu
        180             185             190
Asp Gly Lys Val Leu Glu Ala Leu Gln Val Leu Arg Cys Glu Leu Thr
        195             200             205
Pro Leu Lys Tyr Asn Thr Glu Arg Ile His Val Leu Ser Gly Tyr Leu
    210             215             220
Met Cys Ser His Ala Glu Asp Leu Arg Ala Lys Ala Glu Trp Glu Gly
225             230             235             240
Lys Gly Thr Ala Ser Arg Ser Lys Leu Leu Asp Lys Leu Gln Thr Tyr
            245             250             255
Leu Pro Pro Ser Val Met Leu Pro Pro Arg Arg Leu Gln Thr Leu Leu
        260             265             270
Arg Gln Ala Val Glu Leu Gln Arg Asp Arg Cys Leu Tyr His Asn Thr
    275             280             285
Lys Leu Asp Asn Asn Leu Asp Ser Val Ser Leu Leu Ile Asp His Val
    290             295             300
Cys Ser Lys Arg Gln Phe Pro Xaa Leu Tyr Ala Ala Asp Thr Tyr Gly
305             310             315             320
Ser Ile Val Met Asn Phe Gly Ser Cys
            325
```

```
<210> 1407
<211> 713
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (134)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (280)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (282)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (322)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1407
Ser Pro Gly Pro Gln Pro His Ser Xaa Xaa Arg Ser Pro Pro Pro Pro
 1               5                  10                  15

Pro Leu Arg Pro Pro Pro Met Lys Arg Leu Pro Leu Leu Val Val Phe
            20                  25                  30

Ser Thr Leu Leu Asn Cys Ser Tyr Thr Gln Asn Cys Thr Lys Thr Pro
            35                  40                  45

Cys Leu Pro Asn Ala Lys Cys Glu Ile Arg Asn Gly Ile Glu Ala Cys
        50                  55                  60

Tyr Cys Asn Met Gly Phe Ser Gly Asn Gly Val Thr Ile Cys Glu Asp
65              70                  75                  80

Asp Asn Glu Cys Gly Asn Leu Thr Gln Ser Cys Gly Glu Asn Ala Asn
                85                  90                  95

Cys Thr Asn Thr Glu Gly Ser Tyr Tyr Cys Met Cys Val Pro Gly Phe
            100                 105                 110

Arg Ser Ser Ser Asn Gln Asp Arg Phe Ile Thr Asn Asp Gly Thr Val
        115                 120                 125
```

```
Cys Ile Glu Asn Val Xaa Ala Asn Cys His Leu Asp Asn Val Cys Ile
    130             135             140

Ala Ala Asn Ile Asn Lys Thr Leu Thr Lys Ile Arg Ser Ile Lys Glu
145             150             155             160

Pro Val Ala Leu Leu Gln Glu Val Tyr Arg Asn Ser Val Thr Asp Leu
                165             170             175

Ser Pro Thr Asp Ile Ile Thr Tyr Ile Glu Ile Leu Ala Glu Ser Ser
            180             185             190

Ser Leu Leu Gly Tyr Lys Asn Asn Thr Ile Ser Ala Lys Asp Thr Leu
        195             200             205

Ser Asn Ser Thr Leu Thr Glu Phe Val Lys Thr Val Asn Asn Phe Val
    210             215             220

Gln Arg Asp Thr Phe Val Val Trp Asp Lys Leu Ser Val Asn His Arg
225             230             235             240

Arg Thr His Leu Thr Lys Leu Met His Thr Val Glu Gln Ala Thr Leu
            245             250             255

Arg Ile Ser Gln Ser Phe Gln Lys Thr Thr Glu Phe Asp Thr Asn Ser
            260             265             270

Thr Asp Ile Ala Leu Lys Val Xaa Phe Xaa Asp Ser Tyr Asn Met Lys
        275             280             285

His Ile His Pro His Met Asn Met Asp Gly Asp Tyr Ile Asn Ile Phe
    290             295             300

Pro Lys Arg Lys Ala Ala Tyr Asp Ser Asn Gly Asn Val Ala Val Ala
305             310             315             320

Phe Xaa Tyr Tyr Lys Ser Ile Gly Pro Leu Leu Ser Ser Ser Asp Asn
                325             330             335

Phe Leu Leu Lys Pro Gln Asn Tyr Asp Asn Ser Glu Glu Glu Glu Arg
            340             345             350

Val Ile Ser Ser Val Ile Ser Val Ser Met Ser Ser Asn Pro Pro Thr
        355             360             365

Leu Tyr Glu Leu Glu Lys Ile Thr Phe Thr Leu Ser His Arg Lys Val
    370             375             380

Thr Asp Arg Tyr Arg Ser Leu Cys Ala Phe Trp Asn Tyr Ser Pro Asp
385             390             395             400
```

```
Thr Met Asn Gly Ser Trp Ser Ser Glu Gly Cys Glu Leu Thr Tyr Ser
                405                 410                 415

Asn Glu Thr His Thr Ser Cys Arg Cys Asn His Leu Thr His Phe Ala
            420                 425                 430

Ile Leu Met Ser Ser Gly Pro Ser Ile Gly Ile Lys Asp Tyr Asn Ile
            435                 440                 445

Leu Thr Arg Ile Thr Gln Leu Gly Ile Ile Ile Ser Leu Ile Cys Leu
    450                 455                 460

Ala Ile Cys Ile Phe Thr Phe Trp Phe Phe Ser Glu Ile Gln Ser Thr
465                 470                 475                 480

Arg Thr Thr Ile His Lys Asn Leu Cys Cys Ser Leu Phe Leu Ala Glu
            485                 490                 495

Leu Val Phe Leu Val Gly Ile Asn Thr Asn Thr Asn Lys Leu Phe Cys
            500                 505                 510

Ser Ile Ile Ala Gly Leu Leu His Tyr Phe Phe Leu Ala Ala Phe Ala
            515                 520                 525

Trp Met Cys Ile Glu Gly Ile His Leu Tyr Leu Ile Val Val Gly Val
    530                 535                 540

Ile Tyr Asn Lys Gly Phe Leu His Lys Asn Phe Tyr Ile Phe Gly Tyr
545                 550                 555                 560

Leu Ser Pro Ala Val Val Val Gly Phe Ser Ala Ala Leu Gly Tyr Arg
                565                 570                 575

Tyr Tyr Gly Thr Thr Lys Val Cys Trp Leu Ser Thr Glu Asn Asn Phe
            580                 585                 590

Ile Trp Ser Phe Ile Gly Pro Ala Cys Leu Ile Ile Leu Val Asn Leu
        595                 600                 605

Leu Ala Phe Gly Val Ile Ile Tyr Lys Val Phe Arg His Thr Ala Gly
    610                 615                 620

Leu Lys Pro Glu Val Ser Cys Phe Glu Asn Ile Arg Ser Cys Ala Arg
625                 630                 635                 640

Gly Ala Leu Ala Leu Leu Phe Leu Leu Gly Thr Thr Trp Ile Phe Gly
            645                 650                 655

Val Leu His Val Val His Ala Ser Val Val Thr Ala Tyr Leu Phe Thr
            660                 665                 670
```

```
Val Ser Asn Ala Phe Gln Gly Met Phe Ile Phe Leu Phe Leu Cys Val
        675                 680                 685

Leu Ser Arg Lys Ile Gln Glu Glu Tyr Tyr Arg Leu Phe Lys Asn Val
        690                 695                 700

Pro Cys Cys Phe Gly Cys Leu Ser Cys
705                 710
```

<210> 1408
<211> 336
<212> PRT
<213> Homo sapiens

<400> 1408
```
Gln Arg Gly His Gln Gly Cys Arg Arg Ala Arg Asn Cys Arg Val Gln
  1               5               10                  15

His Pro Val Cys Ser Arg Gly Arg Asp Ser Gly Leu Tyr His Leu Pro
                20                  25                  30

His Pro Gln Pro Val Pro Glu Asn Thr Trp Leu Tyr Gln Ala Leu Arg
            35                  40                  45

Glu Gly Thr Arg Val Gln Ser Val Glu Gln Ile Arg Glu Val Ala Ser
        50                  55                  60

Gly Ala Ala Arg Ile Arg Gly Glu Thr Leu Gly Leu Ile Gly Phe Gly
 65                  70                  75                  80

Arg Thr Gly Gln Ala Val Ala Val Arg Ala Lys Ala Phe Gly Phe Ser
                85                  90                  95

Val Ile Phe Tyr Asp Pro Tyr Leu Gln Asp Gly Ile Glu Arg Ser Leu
            100                 105                 110

Gly Val Gln Arg Val Tyr Thr Leu Gln Asp Leu Leu Tyr Gln Ser Asp
            115                 120                 125

Cys Val Ser Leu His Cys Asn Leu Asn Glu His Asn His His Leu Ile
        130                 135                 140

Asn Asp Phe Thr Ile Lys Gln Met Arg Gln Gly Ala Phe Leu Val Asn
145                 150                 155                 160

Ala Ala Arg Gly Gly Leu Val Asp Glu Lys Ala Leu Ala Gln Ala Leu
                165                 170                 175

Lys Glu Gly Arg Ile Arg Gly Ala Ala Leu Asp Val His Glu Ser Glu
```

```
              180                    185                    190

  Pro Phe Ser Phe Ala Gln Gly Pro Leu Lys Asp Ala Pro Asn Leu Ile
          195                200                205

  Cys Thr Pro His Thr Ala Trp Tyr Ser Glu Gln Ala Ser Leu Glu Met
      210                215                220

  Arg Glu Ala Ala Ala Thr Glu Ile Arg Arg Ala Ile Thr Gly Arg Ile
  225                230                235                240

  Pro Glu Ser Leu Arg Asn Cys Val Asn Lys Glu Phe Phe Val Thr Ser
                  245                250                255

  Ala Pro Trp Ser Val Ile Asp Gln Gln Ala Ile His Pro Glu Leu Asn
              260                265                270

  Gly Ala Thr Tyr Arg Tyr Pro Pro Gly Ile Val Gly Val Ala Pro Gly
              275                280                285

  Gly Leu Pro Ala Ala Met Glu Gly Ile Ile Pro Gly Gly Ile Pro Val
  290                295                300

  Thr His Asn Leu Pro Thr Val Ala His Pro Ser Gln Ala Pro Ser Pro
  305                310                315                320

  Asn Gln Pro Thr Lys His Gly Asp Asn Arg Glu His Pro Asn Glu Gln
                  325                330                335
```

<210> 1409
<211> 76
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (73)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1409
Glu Ala Glu Glu Asp Thr Ser Glu Arg Ser Glu Glu Lys Arg Ser Val

```
         1                5                    10                   15

        Asn Cys Trp Asp Leu Gly Asp Gln Val Gln Gly Gly Glu Tyr Lys Leu
                     20                  25                  30


        Ser Leu Phe Gly Phe Ala Ile Leu Gly Leu Thr Lys Pro Cys Ser Ile
                     35              40                  45


        Ser Ser Ile Leu Gly Asn Asn Leu Leu Arg Trp Ala Phe Ile Phe Cys
                 50                  55                  60


        Phe Pro Glu Leu Glu Ile Ser Ile Xaa Xaa Lys Leu
        65                  70                  75
```

```
<210> 1410
<211> 236
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (157)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (167)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (181)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (183)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1410
His Ala Ala Ser Thr Thr Cys Pro Glu Gln Met Asp Cys Ser Pro Thr
1                5                    10                   15


Asp Ser Ser Ser Ala Ser Pro Gly Ala Ser Thr Thr Ser Thr Pro Gly
                 20                  25                  30


Ala Ser Pro Ala Pro Arg Ser Arg Lys Pro Gly Ala Val Ile Glu Ser
            35                  40                  45
```

```
Phe Val Asn His Ala Pro Gly Val Phe Ser Gly Thr Phe Ser Gly Thr
    50                  55              60

Leu His Pro Asn Cys Gln Asp Ser Ser Gly Arg Pro Arg Arg Asp Ile
    65              70              75              80

Gly Thr Ile Leu Gln Ile Leu Asn Asp Leu Leu Ser Ala Thr Arg His
                85              90              95

Tyr Gln Gly Met Pro Pro Ser Leu Ala Gln Leu Arg Cys His Ala Gln
            100             105             110

Cys Ser Pro Ala Ser Pro Ala Pro Asp Leu Ala Pro Arg Thr Thr Ser
        115             120             125

Cys Glu Lys Leu Thr Ala Ala Pro Ser Ala Ser Leu Leu Gln Gly Gln
    130             135             140

Ser Gln Ile Arg Met Cys Lys Pro Pro Gly Asp Arg Xaa Ser Ala Asp
145             150             155             160

Arg Lys Pro Arg His Ala Xaa Lys Val Glu Arg Leu Gln Leu Leu Leu
            165             170             175

His Glu Lys Arg Xaa Ser Xaa Lys Gly Pro Ala Gly Pro Arg Val Ser
            180             185             190

Val Pro Leu Val Thr Gln Pro Gln Gly Gly Arg Ser Asp Ser Ser Ser
        195             200             205

Ser Gly Gly Gly Gly Thr Gln Ala Gln Ala Ser Gly Leu Gly Leu Asp
    210             215             220

Phe Glu Glu Leu Arg Met Glu Ala Arg Ser Gln Pro
225             230             235
```

<210> 1411
<211> 280
<212> PRT
<213> Homo sapiens

<400> 1411
```
Asn Trp Gln Cys Cys Val Lys Thr Met Val Tyr His His Met Thr Glu
    1               5               10              15

Glu Glu Arg Phe Glu Val Asp Gln Leu Gln Gly Leu Arg Asn Ser Val
            20              25              30

Arg Met Glu Leu Gln Asp Leu Glu Leu Gln Leu Glu Glu Arg Leu Leu
```

```
                35                      40                      45

Gly Leu Glu Glu Gln Leu Arg Ala Val Arg Met Pro Ser Pro Phe Arg
        50                  55                  60

Ser Ser Ala Leu Met Gly Met Cys Gly Ser Arg Ser Ala Asp Asn Leu
65                  70                  75                  80

Ser Cys Pro Ser Pro Leu Asn Val Met Glu Pro Val Thr Glu Leu Met
                85                  90                  95

Gln Glu Gln Ser Tyr Leu Lys Ser Glu Leu Gly Leu Gly Leu Gly Glu
            100                 105                 110

Met Gly Phe Glu Ile Pro Pro Gly Glu Ser Ser Glu Ser Val Phe Ser
        115                 120                 125

Gln Ala Thr Ser Glu Ser Ser Ser Val Cys Ser Gly Pro Ser His Ala
    130                 135                 140

Asn Arg Arg Thr Gly Val Pro Ser Thr Ala Ser Val Gly Lys Ser Lys
145                 150                 155                 160

Thr Pro Leu Val Ala Arg Lys Lys Val Phe Arg Ala Ser Val Ala Leu
            165                 170                 175

Thr Pro Thr Ala Pro Ser Arg Thr Gly Ser Val Gln Thr Pro Pro Asp
        180                 185                 190

Leu Glu Ser Ser Glu Glu Val Asp Ala Ala Glu Gly Ala Pro Glu Val
    195                 200                 205

Val Gly Pro Lys Ser Glu Val Glu Glu Gly His Gly Lys Leu Pro Ser
    210                 215                 220

Met Pro Ala Ala Glu Glu Met His Lys Asn Val Glu Gln Asp Glu Leu
225                 230                 235                 240

Gln Gln Val Ile Arg Glu Ile Lys Glu Ser Ile Val Gly Glu Ile Arg
                245                 250                 255

Arg Glu Ile Val Ser Gly Leu Leu Ala Ala Val Ser Ser Ser Lys Ala
            260                 265                 270

Ser Asn Ser Lys Gln Asp Tyr His
        275                 280


<210> 1412
<211> 96
```

```
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (93)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (96)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1412
Pro Gln His Thr Thr Pro Pro Pro Thr Glu Thr Gly Thr Ser Gly Leu
 1               5                   10                  15

Ser Ser Gly Val Ser Gly Ser Thr Thr Ala Ala Ser Ser Pro Xaa Gly
            20                  25                  30

Leu Val Glu Arg Glu Gly Val Val Leu Val Phe Gly Pro Leu Thr Ala
            35                  40                  45

Asp Ser Gln Glu Val Leu Arg Arg Ala Trp His Trp Ala Gln Arg Leu
        50                  55                  60

Gln Asp Tyr Cys Ala Thr Gln Pro Ala Leu Phe His Val Gly Phe Pro
    65                  70                  75                  80

Val Ser Leu Ile Asp His Glu Gly Phe Gln Val Cys Xaa Asp Ser Xaa
                85                  90                  95


<210> 1413
<211> 172
<212> PRT
<213> Homo sapiens

<400> 1413
Phe Ser Val Phe Val Leu Tyr Ser Leu Arg Asn Ala Ser Gly Leu Thr
 1               5                   10                  15
```

```
Ala Ala Asp Ile Ala Gln Thr Gln Gly Phe Gln Glu Cys Ala Gln Phe
            20              25              30

Leu Leu Asn Leu Gln Asn Cys His Leu Asn His Phe Tyr Asn Asn Gly
        35              40              45

Ile Leu Asn Gly Gly His Gln Asn Val Phe Pro Asn His Ile Ser Val
    50              55              60

Gly Thr Asn Arg Lys Arg Cys Leu Glu Asp Ser Glu Asp Phe Gly Val
65              70              75              80

Lys Lys Ala Arg Thr Glu Ala Gln Ser Leu Asp Ser Ala Val Pro Leu
            85              90              95

Thr Asn Gly Asp Thr Glu Asp Asp Ala Asp Lys Met His Val Asp Arg
            100             105             110

Glu Phe Ala Val Val Thr Gly Gly Ser Gly Gln Phe Pro Val Ser Cys
        115             120             125

Asn Asn Asn Pro Met Val Glu Asp Thr Lys Gln Gln Glu Ser Gly Ser
    130             135             140

Val Gly Pro Lys Glu Ile Glu Ile Tyr Thr Val Ser Ala Met Gln Thr
145             150             155             160

Pro Cys Arg Cys Arg Asn Gln Tyr Ala Tyr Tyr Phe
            165             170
```

<210> 1414
<211> 264
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (46)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (107)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (173)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1414
Leu Cys Ala Pro Arg Ser Pro Arg Pro Gly Thr Gly Asp Ala Ala Pro
 1               5                   10                  15

Pro Ser Glu Pro Xaa Ala Ser Ala Ser Gly Thr Asp Leu Leu Gly Trp
            20                  25                  30

Leu Ile Lys Glu Glu Ala Ala Ala Met Ser Ala Val Gly Xaa Ala Thr
        35                  40                  45

Pro Tyr Leu His His Pro Gly Asp Ser His Ser Gly Arg Val Ser Phe
    50                  55                  60

Leu Gly Ala Gln Leu Pro Pro Glu Val Ala Ala Met Ala Arg Leu Leu
65                  70                  75                  80

Gly Asp Leu Asp Xaa Ser Thr Phe Arg Lys Leu Leu Lys Phe Val Val
                85                  90                  95

Ser Ser Leu Gln Gly Glu Asp Cys Arg Glu Xaa Leu Gln Arg Leu Gly
            100                 105                 110

Val Ser Ala Asn Leu Pro Glu Glu Gln Leu Gly Ala Leu Leu Ala Gly
            115                 120                 125

Met His Thr Leu Leu Gln Gln Ala Leu Arg Leu Pro Pro Thr Ser Leu
    130                 135                 140

Lys Pro Asp Thr Phe Arg Asp Gln Leu Gln Glu Leu Cys Ile Pro Gln
145                 150                 155                 160

Asp Leu Val Gly Asp Leu Ala Ser Val Val Phe Gly Xaa Pro Ala Ala
                165                 170                 175

Leu Leu Asp Ser Val Ala Gln Gln Gln Gly Ala Trp Leu Pro His Val
                180                 185                 190

Ala Asp Phe Arg Trp Arg Val Asp Val Ala Ile Ser Thr Ser Ala Leu
                195                 200                 205
```

```
Ala Arg Ser Leu Gln Pro Ser Val Leu Met Gln Leu Lys Leu Ser Asp
    210             215             220

Gly Ser Ala Tyr Arg Phe Glu Val Pro Thr Ala Lys Phe Gln Glu Leu
225             230             235             240

Arg Tyr Ser Val Ala Leu Val Leu Lys Glu Met Ala Asp Leu Glu Lys
                245             250             255

Arg Cys Glu Arg Arg Leu Gln Asp
                260
```

```
<210> 1415
<211> 579
<212> PRT
<213> Homo sapiens

<400> 1415
Ala Ala Asp Arg Gly Arg Gly Pro Gly Ala His Arg Pro Ile Ser Gly
  1           5               10              15

Asn Met Ala Thr Glu His Val Asn Gly Asn Gly Thr Glu Glu Pro Met
            20              25              30

Asp Thr Thr Ser Ala Val Ile His Ser Glu Asn Phe Gln Thr Leu Leu
        35              40              45

Asp Ala Gly Leu Pro Gln Lys Val Ala Glu Lys Leu Asp Glu Ile Tyr
    50              55              60

Val Ala Gly Leu Val Ala His Ser Asp Leu Asp Glu Arg Ala Ile Glu
 65              70              75              80

Ala Leu Lys Glu Phe Asn Glu Asp Gly Ala Leu Ala Val Leu Gln Gln
                85              90              95

Phe Lys Asp Ser Asp Leu Ser His Val Gln Asn Lys Ser Ala Phe Leu
            100             105             110

Cys Gly Val Met Lys Thr Tyr Arg Gln Arg Glu Lys Gln Gly Thr Lys
            115             120             125

Val Ala Asp Ser Ser Lys Gly Pro Asp Glu Ala Lys Ile Lys Ala Leu
    130             135             140

Leu Glu Arg Thr Gly Tyr Thr Leu Asp Val Thr Thr Gly Gln Arg Lys
145             150             155             160

Tyr Gly Gly Pro Pro Pro Asp Ser Val Tyr Ser Gly Gln Gln Pro Ser
```

```
                 165                  170                  175
Val Gly Thr Glu Ile Phe Val Gly Lys Ile Pro Arg Asp Leu Phe Glu
             180                  185                  190

Asp Glu Leu Val Pro Leu Phe Glu Lys Ala Gly Pro Ile Trp Asp Leu
         195                  200                  205

Arg Leu Met Met Asp Pro Leu Thr Gly Leu Asn Arg Gly Tyr Ala Phe
     210                  215                  220

Val Thr Phe Cys Thr Lys Glu Ala Ala Gln Glu Ala Val Lys Leu Tyr
225                  230                  235                  240

Asn Asn His Glu Ile Arg Ser Gly Lys His Ile Gly Val Cys Ile Ser
             245                  250                  255

Val Ala Asn Asn Arg Leu Phe Val Gly Ser Ile Pro Lys Ser Lys Thr
             260                  265                  270

Lys Glu Gln Ile Leu Glu Glu Phe Ser Lys Val Thr Glu Gly Leu Thr
         275                  280                  285

Asp Val Ile Leu Tyr His Gln Pro Asp Asp Lys Lys Lys Asn Arg Gly
     290                  295                  300

Phe Cys Phe Leu Glu Tyr Glu Asp His Lys Thr Ala Ala Gln Ala Arg
305                  310                  315                  320

Arg Arg Leu Met Ser Gly Lys Val Lys Val Trp Gly Asn Val Gly Thr
             325                  330                  335

Val Glu Trp Ala Asp Pro Ile Glu Asp Pro Asp Pro Glu Val Met Ala
             340                  345                  350

Lys Val Lys Val Leu Phe Val Arg Asn Leu Ala Asn Thr Val Thr Glu
         355                  360                  365

Glu Ile Leu Glu Lys Ala Phe Ser Gln Phe Gly Lys Leu Glu Arg Val
     370                  375                  380

Lys Lys Leu Lys Asp Tyr Ala Phe Ile His Phe Asp Glu Arg Asp Gly
385                  390                  395                  400

Ala Val Lys Ala Met Glu Glu Met Asn Gly Lys Asp Leu Glu Gly Glu
             405                  410                  415

Asn Ile Glu Ile Val Phe Ala Lys Pro Pro Asp Gln Lys Arg Lys Glu
             420                  425                  430

Arg Lys Ala Gln Arg Gln Ala Ala Lys Asn Gln Met Tyr Asp Asp Tyr
```

```
                 435                    440                    445
     Tyr Tyr Tyr Gly Pro Pro His Met Pro Pro Pro Thr Arg Gly Arg Gly
         450                 455                 460

     Arg Gly Gly Arg Gly Gly Tyr Gly Tyr Pro Pro Asp Tyr Tyr Gly Tyr
     465             470                 475                 480

     Glu Asp Tyr Tyr Asp Tyr Tyr Gly Tyr Asp Tyr His Asn Tyr Arg Gly
                 485             490                 495

     Gly Tyr Glu Asp Pro Tyr Tyr Gly Tyr Glu Asp Phe Gln Val Gly Ala
                 500             505                 510

     Arg Gly Arg Gly Gly Arg Gly Ala Arg Gly Ala Ala Pro Ser Arg Gly
             515             520                 525

     Arg Gly Ala Ala Pro Pro Arg Gly Arg Ala Gly Tyr Ser Gln Arg Gly
         530             535                 540

     Gly Pro Gly Ser Ala Arg Gly Val Arg Gly Ala Arg Gly Gly Ala Gln
     545             550             555                 560

     Gln Gln Arg Gly Arg Gly Gln Gly Lys Gly Val Glu Ala Gly Pro Asp
                 565             570                 575

     Leu Leu Gln
```

```
<210> 1416
<211> 230
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (196)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (204)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (230)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<400> 1416
Ser Thr His Ala Ser Ala His Ala Ser Glu Pro Gly Gln Gly Gly Trp
1   5   10   15

Pro Glu Val Pro Ala Glu Gly Ala Ser Arg Pro Cys Ala Ala Val Pro
            20   25   30

Gly Gly Gln Arg Gly Cys Pro Ala Cys Pro Leu Ala Gly Glu Arg Glu
        35   40   45

Leu Thr His Leu Leu Leu Pro Ala Ser Glu Gly Asp Thr Glu Pro Gln
        50   55   60

Val Thr Pro His His Gln Arg Arg Cys Leu Cys Leu Ser Asp Lys Tyr
65   70   75   80

Ser Gln Ala Cys His Pro Leu Gly Ser Lys Val Arg Arg Cys Arg Lys
                85   90   95

Pro Gly Pro Arg Asp Arg Gln Leu Thr Arg Val Asp Lys Ser Pro Glu
                100   105   110

Met Trp Cys Ile Val Leu Phe Ser Leu Leu Ala Trp Val Tyr Ala Glu
        115   120   125

Pro Thr Met Tyr Gly Glu Ile Leu Ser Pro Asn Tyr Pro Gln Ala Tyr
        130   135   140

Pro Ser Glu Val Glu Lys Ser Trp Asp Ile Glu Val Pro Glu Gly Tyr
145   150   155   160

Gly Ile His Leu Tyr Phe Thr His Leu Asp Ile Glu Leu Ser Glu Asn
                165   170   175

Cys Ala Tyr Asp Ser Val Gln Ile Ile Ser Gly Asp Thr Glu Glu Gly
                180   185   190

Arg Leu Cys Xaa Gln Arg Ser Ser Asn Asn Pro Xaa Leu Gln Leu Trp
        195   200   205

Lys Ser Ser Lys Ser His Thr Thr Asn Ser Lys Gly Gly Asn Pro Leu
        210   215   220

Phe Phe Leu Lys Lys Xaa
225   230

<210> 1417
<211> 106
<212> PRT

<213> Homo sapiens

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (75)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1417
Ala Leu Pro Val Met Thr Ala Ala Gly Thr Gly Trp Pro Glu Ala Gly
 1   5   10   15

Xaa Leu Pro Glu Val Met Gly Asp Gly Leu Ala Asn Gln Ile Asn Asn
                20   25   30

Pro Glu Val Glu Val Asp Ile Thr Lys Pro Asp Met Thr Ile Arg Gln
            35   40   45

Gln Ile Met Gln Leu Lys Ile Met Thr Asn Arg Leu Arg Ser Leu Thr
        50   55   60

Thr Ala Thr Thr Trp Thr Ser Arg Thr Pro Xaa Thr Thr Ala Ala Ala
 65   70   75   80

Arg Ala Ala Val Met Ala Val Trp Met Thr Ser Ala Ala Gly Arg Ser
                85   90   95

Ala Gly Arg Ala Pro Ala Pro Gly Arg Pro
            100   105

<210> 1418
<211> 258
<212> PRT
<213> Homo sapiens

<400> 1418
Gly His Leu Leu Leu Cys Ala Trp Gly Pro Gly Gly Pro Gly Pro Leu
 1   5   10   15

Gly Pro Ser Glu Glu Asn Phe Asp Met Glu Ala Phe Thr Glu Met Met
                20   25   30

Glu Ala Tyr Val Pro Gly Phe Ala His Ile Pro Arg Gly Thr Ile Gly
            35   40   45

```
Asp Met Met Gln Lys Leu Ser Gly Gln Leu Ser Asp Ala Arg Asn Lys
    50              55              60

Glu Asn Leu Gln Pro Gln Ser Ser Gly Val Gln Gly Gln Val Pro Ile
65              70              75              80

Ser Pro Glu Pro Leu Gln Arg Pro Glu Met Leu Lys Glu Glu Thr Arg
                85              90              95

Ser Ser Ala Ala Ala Ala Ala Asp Thr Gln Asp Glu Ala Thr Gly Ala
            100             105             110

Glu Glu Glu Leu Leu Pro Gly Val Asp Val Leu Leu Glu Val Phe Pro
        115             120             125

Thr Cys Ser Val Glu Gln Ala Gln Trp Val Leu Ala Lys Ala Arg Gly
    130             135             140

Asp Leu Glu Glu Ala Val Gln Met Leu Val Glu Gly Lys Glu Glu Gly
145             150             155             160

Pro Ala Ala Trp Glu Gly Pro Asn Gln Asp Leu Pro Arg Arg Leu Arg
            165             170             175

Gly Pro Gln Lys Asp Glu Leu Lys Ser Phe Ile Leu Gln Lys Tyr Met
            180             185             190

Met Val Asp Ser Ala Glu Asp Gln Lys Ile His Arg Pro Met Ala Pro
        195             200             205

Lys Glu Ala Pro Lys Lys Leu Ile Arg Tyr Ile Asp Asn Gln Val Val
    210             215             220

Ser Thr Lys Gly Glu Arg Phe Lys Asp Val Arg Asn Pro Glu Ala Glu
225             230             235             240

Glu Met Lys Ala Thr Tyr Ile Asn Leu Lys Pro Ala Arg Lys Tyr Arg
            245             250             255

Phe His
```

```
<210> 1419
<211> 280
<212> PRT
<213> Homo sapiens

<400> 1419
Leu Val Glu Pro Ala Met Ala Glu Pro Ala Ser Val Ala Ala Glu Ser
```

```
        1                   5                       10                      15

      Leu Ala Gly Ser Arg Ala Arg Ala Ala Arg Thr Val Leu Gly Gln Val
                  20                      25                  30

      Val Leu Pro Gly Glu Glu Leu Leu Leu Pro Glu Gln Glu Asp Ala Glu
                  35                      40                  45

      Gly Pro Gly Gly Ala Val Glu Arg Pro Leu Ser Leu Asn Ala Arg Ala
              50                      55                  60

      Cys Ser Arg Val Arg Val Val Cys Gly Pro Gly Leu Arg Arg Cys Gly
      65                      70                      75                  80

      Asp Arg Leu Leu Val Thr Lys Cys Gly Arg Leu Arg His Lys Glu Pro
                      85                      90                  95

      Gly Ser Gly Ser Gly Gly Gly Val Tyr Trp Val Asp Ser Gln Gln Lys
                  100                     105                 110

      Arg Tyr Val Pro Val Lys Gly Asp His Val Ile Gly Ile Val Thr Ala
                  115                     120                 125

      Lys Ser Gly Asp Ile Phe Lys Val Asp Val Gly Gly Ser Glu Pro Ala
                  130                     135                 140

      Ser Leu Ser Tyr Leu Ser Phe Glu Gly Ala Thr Lys Arg Asn Arg Pro
      145                     150                     155                 160

      Asn Val Gln Val Gly Asp Leu Ile Tyr Gly Gln Phe Val Val Ala Asn
                      165                     170                 175

      Lys Asp Met Glu Pro Glu Met Val Cys Ile Asp Ser Cys Gly Arg Ala
                  180                     185                 190

      Asn Gly Met Gly Val Ile Gly Gln Asp Gly Leu Leu Phe Lys Val Thr
                  195                     200                 205

      Leu Gly Leu Ile Arg Lys Leu Leu Ala Pro Asp Cys Glu Ile Ile Gln
                  210                     215                 220

      Glu Val Gly Lys Leu Tyr Pro Leu Glu Ile Val Phe Gly Met Asn Gly
      225                     230                     235                 240

      Arg Ile Trp Val Lys Ala Lys Thr Ile Gln Gln Thr Leu Ile Leu Ala
                      245                     250                 255

      Asn Ile Leu Glu Ala Cys Glu His Met Thr Ser Asp Gln Arg Lys Gln
                  260                     265                     270

      Ile Phe Ser Arg Leu Ala Glu Ser
```

275   280

<210> 1420
<211> 147
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (104)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (105)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1420
Phe Pro Gly Thr Gly Ser Asp Gly Gly Xaa Pro Glu Thr Val Asp Ser
 1   5   10   15

Gly Arg Ser Glu Pro Pro Gly Ala Val Val Leu Pro Arg Leu Arg Glu
            20   25   30

Val Gly Arg Glu Arg Thr Trp Arg Pro Gly Ser Met Ala Gly Leu Glu
            35   40   45

Leu Leu Ser Asp Gln Gly Tyr Arg Val Asp Gly Arg Arg Ala Gly Glu
        50   55   60

Leu Arg Lys Ile Gln Ala Arg Met Gly Val Phe Ala Gln Ala Asp Gly
65   70   75   80

Ser Ala Tyr Ile Glu Gln Gly Asn Thr Lys Ala Leu Ala Val Val Tyr
                85   90   95

Gly Pro His Glu Ala Ser Gly Xaa Xaa Gly Trp Gly Ile Val Trp Pro
            100   105   110

Trp Glu Leu Arg Gly Ser Arg Ala Glu Arg Trp Leu Gly Asp Leu Arg
            115   120   125

Gly Lys Ala Ala Arg Leu Ile Tyr Thr Ala Met Leu Ser Thr Ala Ser
            130   135   140

His Ser Glu
145

<210> 1421
<211> 300
<212> PRT
<213> Homo sapiens

<400> 1421
Gly Leu Pro Ile Asn Cys Ile Cys Glu Arg Leu Asn Ile Ile Gly Glu
1   5   10   15

Ile Asn Thr Asp Thr Val Tyr Arg Gln Ala Ile Asn Ser Lys Met Phe
            20   25   30

Glu Val Asp Met Lys Ile Ala Ala Met His Val Lys Arg Lys Gln Leu
            35   40   45

His Gln Leu Leu Pro Asn His Val Leu Gln Lys Lys Lys His Ser
        50   55   60

Thr Glu Gly Val Lys Leu Thr Ala Leu Asn Asp Ser Ser Leu Asp Leu
65   70   75   80

Ser Met Asp Ser Asp Asn Ser Met Ser Val Pro Ser Pro Thr Ser Ala
                85   90   95

Thr Lys Thr Ser Pro Leu Asn Ser Ser Gly Ser Ser Gln Gly Arg Asn
                100   105   110

Ser Pro Ala Pro Ala Val Thr Ala Ala Ser Val Thr Asn Ile Gln Ala
            115   120   125

Thr Glu Val Ser Val Pro Gln Val Asn Ser Ser Glu Ser Ser Gly Gly
        130   135   140

Thr Ser Ser Glu Ser Ile Pro Gln Thr Ala Thr Gln Pro Ala Ile Ser
145   150   155   160

Pro Pro Pro Lys Pro Thr Val Ser Arg Val Val Ser Ser Thr Arg Leu
                165   170   175

Val Asn Pro Pro Pro Arg Ser Ser Gly Asn Ala Ala Thr Ser Gly Asn
                180   185   190

Ala Ala Thr Lys Ile Pro Thr Pro Ile Val Gly Val Lys Arg Thr Ser
            195   200   205

```
Ser Pro His Lys Glu Glu Ser Pro Lys Lys Thr Lys Thr Glu Glu Asp
    210                 215             220

Glu Thr Ser Glu Asp Ala Asn Cys Leu Ala Leu Ser Gly His Asp Lys
225                 230             235                 240

Thr Glu Ala Lys Glu Gln Leu Asp Thr Glu Thr Ser Thr Thr Gln Ser
                245             250                 255

Glu Thr Ile Gln Thr Ala Ala Ser Leu Leu Ala Ser Gln Lys Thr Ser
                260             265                 270

Ser Thr Asp Leu Ser Asp Ile Pro Ala Leu Pro Ala Asn Pro Ile Pro
            275             280             285

Val Ile Lys Asn Ser Ile Lys Leu Arg Leu Asn Arg
    290             295             300
```

```
<210> 1422
<211> 315
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (125)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (177)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1422
```

```
Asp Ser Pro Leu His Leu Tyr Gln Lys Asn Ala Arg Leu Lys Asn Val
    1           5               10              15

Glu Phe Leu Leu Val Asn Arg Ile His Cys Gly Thr Arg His Gln Cys
                20              25              30

Leu Gly Tyr Ile Lys Arg Arg Leu Ala Met Cys Ala Arg Arg Leu Gly
            35              40              45

Arg Thr Arg Glu Ala Val Lys Met Met Arg Asp Leu Met Lys Glu Phe
    50              55              60

Pro Leu Leu Ser Met Phe Asn Ile His Glu Asn Leu Leu Glu Ala Leu
    65              70              75              80
```

Leu Glu Leu Gln Ala Tyr Ala Asp Val Gln Ala Val Leu Ala·Lys Tyr
                85   90   95

Asp Asp Ile Ser Leu Pro Lys Ser Ala Thr Ile Cys Tyr Thr Ala Ala
            100   105   110

Leu Leu Lys Ala Arg Ala Val Ser Asp Lys Phe Ser Xaa Glu Ala Ala
            115   120   125

Ser Arg Arg Gly Leu Ser Thr Ala Glu Met Asn Ala Val Glu Ala Ile
    130   135   140

His Arg Ala Val Glu Phe Asn Pro His Val Pro Lys Tyr Leu Leu Glu
145   150   155   160

Met Lys Ser Leu Ile Leu Pro Pro Glu His Ile Leu Lys Arg Gly Asp
            165   170   175

Xaa Glu Ala Ile Ala Tyr Ala Phe Phe His Leu Ala His Trp Lys Arg
            180   185   190

Val Glu Gly Ala Leu Asn Leu Leu His Cys Thr Trp Glu Gly Thr Phe
    195   200   205

Arg Met Ile Pro Tyr Pro Leu Glu Lys Gly His Leu Phe Tyr Pro Tyr
    210   215   220

Pro Ile Cys Thr Glu Thr Ala Asp Arg Glu Leu Leu Pro Ser Phe His
225   230   235   240

Glu Val Ser Val Tyr Pro Lys Lys Glu Leu Pro Phe Phe Ile Leu Phe
            245   250   255

Thr Ala Gly Leu Cys Ser Phe Thr Ala Met Leu Ala Leu Leu Thr His
            260   265   270

Gln Phe Pro Glu Leu Met Gly Val Phe Ala Lys Ala Phe Leu Ser Thr
    275   280   285

Leu Phe Ala Pro Leu Asn Phe Val Met Glu Lys Val Glu Ser Ile Leu
    290   295   300

Pro Ser Ser Leu Trp His Gln Leu Thr Arg Ile
305   310   315

<210> 1423
<211> 164
<212> PRT
<213> Homo sapiens

<400> 1423

```
Ser Phe Pro Tyr Leu Phe Leu Gln Ser Lys Asn Arg Trp Cys Phe Ala
 1               5                  10                  15

Arg Glu Leu Val Lys Arg Tyr Gln Glu Lys Trp Asp Lys Leu Leu Leu
                20              25                  30

Thr Ser Thr Glu Lys Ser His Val Asp Leu Phe Pro Lys Asp Ser Ile
            35                  40                  45

Ile Tyr Leu Thr Ala Asp Ser Pro Asn Val Met Thr Thr Phe Arg His
        50                  55                  60

Asp Lys Val Tyr Val Ile Gly Ser Phe Val Asp Lys Ser Met Gln Pro
65                  70                  75                  80

Gly Thr Ser Leu Ala Lys Ala Lys Arg Leu Asn Leu Ala Thr Glu Cys
                85                  90                  95

Leu Pro Leu Asp Lys Tyr Leu Gln Trp Glu Ile Gly Asn Lys Asn Leu
            100                 105                 110

Thr Leu Asp Gln Met Ile Arg Ile Leu Leu Cys Leu Lys Asn Asn Gly
        115                 120                 125

Asn Trp Gln Glu Ala Leu Gln Phe Val Pro Lys Arg Lys His Thr Gly
    130                 135                 140

Phe Leu Glu Ile Ser Gln His Ser Gln Glu Phe Ile Asn Arg Leu Lys
145                 150                 155                 160

Lys Ala Lys Thr
```

<210> 1424
<211> 81
<212> PRT
<213> Homo sapiens

<400> 1424

```
Glu Val Trp Leu Phe Met His Pro Ser Ser Arg Ala Leu Lys Leu His
 1               5                  10                  15

Gly Leu Ile Lys Val Asp Ala Lys Gln Glu Arg Asn Lys Gln Lys Lys
                20              25                  30

Lys Thr Ser Lys Met Phe Thr Lys Lys Leu Lys Gln Met Ser Ser Ala
            35                  40                  45
```

```
Cys Ser Ile Ser Gln Ser Leu Leu Ser Ser Val Val Asn Met Phe Gln
         50              55              60
```

```
Met Thr Phe Ser Trp Lys Lys Asn Leu Tyr Asn Ile Val Glu Cys Glu
 65              70              75              80
```

```
Gly
```

<210> 1425
<211> 172
<212> PRT
<213> Homo sapiens

<400> 1425
```
Met Gly Gly Asp Ala Gly Asp Arg Glu Pro Gly Pro Ala Ala Arg Ser
 1               5               10              15
```

```
Leu Gly Glu Gly Gln Ala Gly Phe Ala Thr Ala Asp His Ser Gly Gln
             20              25              30
```

```
Glu Arg Glu Thr Glu Lys Ala Met Asp Arg Leu Ala Arg Gly Thr Gln
         35              40              45
```

```
Ser Ile Pro Asn Asp Ser Pro Ala Arg Gly Glu Gly Thr His Ser Glu
         50              55              60
```

```
Glu Glu Gly Phe Ala Met Asp Glu Glu Asp Ser Asp Gly Glu Leu Asn
 65              70              75              80
```

```
Thr Trp Glu Leu Ser Glu Gly Thr Asn Cys Pro Pro Lys Glu Gln Pro
             85              90              95
```

```
Gly Asp Leu Phe Asn Glu Asp Trp Asp Ser Glu Leu Lys Ala Asp Gln
         100             105             110
```

```
Gly Asn Pro Tyr Asp Ala Asp Asp Ile Gln Glu Ser Ile Ser Gln Glu
         115             120             125
```

```
Leu Lys Pro Trp Val Cys Cys Ala Pro Gln Gly Asp Met Ile Tyr Asp
     130             135             140
```

```
Pro Ser Trp His His Pro Pro Pro Leu Ile Pro Tyr Tyr Ser Lys Met
145             150             155             160
```

```
Val Phe Glu Thr Gly Gln Phe Asp Asp Ala Glu Asp
             165             170
```

```
<210> 1426
<211> 276
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (273)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (275)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1426
Cys Lys Lys Gln Arg Leu Gln Gln Gln Gln Gln Arg Arg Trp Gln
 1               5                  10                  15

Gln Gln Gln Gln Arg Arg Gln Gln Gln Gln Gln Arg Arg His Arg Trp
                20                  25                  30

Gln Gln Gln His His Gln Gln Gln Gln Gln Xaa Lys Ile Leu Ile Lys
            35                  40                  45

Ser Ser Pro Lys Leu Ser Val Tyr Pro Asp Pro His Leu His Ser Ser
        50                  55                  60

Gln Glu Arg Glu Arg Gly Lys Gly Gly Arg Lys Lys Lys Lys Pro Asn
65                  70                  75                  80

Asn Leu Ala Glu Thr Ser Gln Arg Met Leu Gln Asn Ser Ala Val Leu
                85                  90                  95

Leu Val Leu Val Ile Ser Ala Ser Ala Thr His Glu Ala Glu Gln Asn
                100                 105                 110

Asp Ser Val Ser Pro Arg Lys Ser Arg Val Ala Ala Gln Asn Ser Ala
        115                 120                 125

Glu Val Val Arg Cys Leu Asn Ser Ala Leu Gln Val Gly Cys Gly Ala
        130                 135                 140

Phe Ala Cys Leu Glu Asn Ser Thr Cys Asp Thr Asp Gly Met Tyr Asp
```

```
         145                      150                      155                      160

Ile Cys Lys Ser Phe Leu Tyr Ser Ala Ala Lys Phe Asp Thr Gln Gly
                 165                 170                 175

Lys Ala Phe Val Lys Glu Ser Leu Lys Cys Ile Ala Asn Gly Val Thr
                 180                 185                 190

Ser Lys Val Phe Leu Ala Ile Arg Arg Cys Ser Thr Phe Gln Arg Met
                 195                 200                 205

Ile Ala Glu Val Gln Glu Glu Cys Tyr Ser Lys Leu Asn Val Cys Ser
         210                 215                 220

Ile Ala Lys Arg Asn Pro Glu Ala Ile Thr Glu Val Val Gln Leu Pro
225                 230                 235                 240

Asn His Phe Ser Asn Arg Tyr Tyr Asn Arg Leu Val Arg Ser Leu Leu
                 245                 250                 255

Glu Cys Asp Glu Asp Thr Val Ser Thr Ile Arg Asp Ser Leu Met Glu
                 260                 265                 270

Xaa Ile Xaa Ala
         275


<210> 1427
<211> 166
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1427
Cys Asn Ser Arg Ser Gln Gly Leu Ala Leu Thr Gln Val Ala Ser Arg
  1               5                  10                  15

Ile Pro Val Gly Lys Arg Pro Ala Thr Ser Gly Leu Glu Leu Ala Cys
                 20                 25                 30

Val Pro Pro Xaa Pro Ala Pro Pro Thr Ser Arg Val Gln Cys Trp Ala
```

```
              35                    40                    45
   Arg Ala Ala Gln Glu Xaa Arg Thr Arg Arg Leu Ala Arg His Gln Thr
        50                    55                    60

   His Pro Thr Gln Arg Arg Gly Pro Gln Ala Arg Pro Val Val Pro Ser
        65                    70                    75                    80

   Arg Trp His Cys Ser Ser Pro Leu Leu Gln Val Gln Arg Pro His Arg
                  85                    90                    95

   Asn Thr Arg Ala Cys Ala Pro Glu Pro Ser Phe Arg Pro Phe Leu His
                  100                   105                   110

   Val Pro Thr Trp Asp Ala Glu Cys Ser Gly Ala Arg Thr Pro Ser Thr
                  115                   120                   125

   Ala Trp Thr Ser Ala Ala Val Lys Leu Arg Glu Ala Cys Leu Ser Gly
        130                   135                   140

   Pro Gly Ser Gly Ser His Gln Leu Leu Leu Leu Thr Pro Arg Ser Lys
   145                   150                   155                   160

   Arg Arg Thr Gly Gly Gly
                  165
```

<210> 1428
<211> 112
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (57)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1428
```
   Gln Arg Gly Ser Thr Ser Glu Thr Pro Arg Arg Arg Ser Ser Val Trp
    1                    5                    10                    15

   Pro Ala Cys Xaa Gln Glu Gly Val Lys Ser Gly Met Tyr Val Val Ile
                  20                    25                    30

   Glu Val Lys Val Ala Thr Gln Glu Gly Lys Glu Ile Thr Cys Arg Ser
```

```
            35                      40                      45
Tyr Leu Met Thr Asn Tyr Glu Ser Xaa Pro Pro Ser Pro Gln Tyr Lys
        50                  55                  60

Lys Ile Ile Cys Met Gly Ala Lys Glu Asn Gly Leu Pro Leu Glu Tyr
65                  70                  75                      80

Gln Glu Lys Leu Lys Ala Ile Glu Pro Asn Asp Tyr Thr Gly Lys Val
                85                  90                  95

Ser Glu Glu Ile Glu Asp Ile Ile Lys Lys Gly Glu Thr Gln Thr Leu
                100                 105                 110
```

<210> 1429
<211> 94
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1429
```
Pro Gly Thr His Val Ser Xaa Pro His Phe Leu Trp Gly Cys Ala Ser
 1           5               10                  15

Leu Arg Val Ala Asn Arg Met Ser Ser Val Gln Trp Trp Ser Gln Asp
            20              25                  30

Ser Val Cys Arg Ala Asp Phe Leu Ser Leu Leu Lys Thr Leu Asn Thr
            35              40                  45

Ala Val Phe Ser Ser Gln Gln Arg Asn Lys Ile Ser Leu Ser Asp Asn
    50                  55                  60

Asp Asn Asn Lys Gln Ser Ile Ala Ser Thr Ala Phe Thr Ala Tyr Xaa
65                  70                  75                      80

Lys Thr Tyr Tyr Val Pro Gly Thr Ser Thr Asp Phe Asn Leu
```

85   90

```
<210> 1430
<211> 95
<212> PRT
<213> Homo sapiens

<400> 1430
Leu Ser Lys Gln Arg Pro Ala Val Gly Val His His Ala Phe His Leu
 1               5                   10                  15

Pro His Cys Phe Phe Ala Ser Leu Leu Glu Ser Pro Val Ser Pro Arg
                20                  25                  30

Leu Ala Met Asp Pro Asn Cys Ser Cys Ala Ala Gly Val Ser Cys Thr
            35                  40                  45

Cys Ala Gly Ser Cys Lys Cys Lys Glu Cys Lys Cys Thr Ser Cys Lys
        50                  55                  60

Lys Ser Cys Cys Ser Cys Cys Pro Val Gly Cys Ser Lys Cys Ala Gln
65                  70                  75                  80

Gly Cys Val Cys Lys Gly Ala Ser Glu Lys Cys Ser Cys Cys Asp
                85                  90                  95


<210> 1431
<211> 81
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1431
Pro Arg His Leu Ile Thr Ile Ser Tyr Val Val Ala Val Arg Asn Ala
 1               5                   10                  15

Phe Gln Val Gly Thr Trp Asp Pro Glu Ser Thr Phe Ala Pro Cys Gly
                20                  25                  30
```

```
Gly Arg Leu Pro Xaa Xaa Lys Met Glu Ala Gln Ser Pro Tyr Tyr Gln
         35              40              45

Thr Val Val Val Ser Arg Gly Arg Gly Glu Met Phe Ile Gly His Ser
    50              55              60

Leu Ser Trp Gly Val Ile Phe Ile Thr Ile His Val Asn Cys Thr Leu
65              70              75              80

Val
```

<210> 1432
<211> 201
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (114)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (193)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (201)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1432

```
Thr His Trp Ser Lys Asp Tyr Gln Leu Val Thr Trp Ser Arg Asp Gln
  1           5               10              15

Thr Leu Arg Met Trp Arg Val Asp Ser Gln Met Gln Arg Leu Cys Ala
            20              25              30

Asn Asp Ile Leu Asp Gly Val Asp Glu Phe Ile Glu Ser Ile Ser Leu
         35              40              45

Leu Pro Glu Pro Glu Lys Thr Leu His Thr Gly Asp Thr Asp His Gln
    50              55              60

His Thr Ala Ser His Gly Glu Glu Glu Ala Leu Lys Glu Asp Pro Pro
65              70              75              80
```

```
Arg Asn Leu Leu Glu Glu Arg Lys Ser Asp Gln Leu Gly Leu Pro Gln
                 85              90                  95

Thr Leu Gln Gln Glu Phe Ser Leu Ile Asn Val Gln Ile Arg Asn Val
            100             105                 110

Asn Xaa Glu Met Asp Ala Ala Asp Arg Ser Cys Thr Val Ser Val His
        115             120                 125

Cys Ser Asn His Arg Val Lys Met Leu Val Lys Phe Pro Ala Gln Tyr
    130             135                 140

Pro Asn Asn Ala Ala Pro Ser Phe Gln Phe Ile Asn Pro Thr Thr Ile
145             150                 155                 160

Thr Ser Thr Met Lys Ala Lys Leu Leu Lys Ile Leu Lys Asp Thr Ala
                165             170                 175

Leu Gln Lys Val Lys Arg Gly Gln Ser Cys Leu Glu Pro Cys Leu Arg
            180             185                 190

Xaa Ser Ser Pro Ala Leu Ser Pro Xaa
        195             200
```

<210> 1433
<211> 150
<212> PRT
<213> Homo sapiens

<400> 1433

```
Thr Val Val Ala Trp Glu Gly Gly Tyr His Thr Phe Ser Thr Cys Leu
  1             5               10                  15

Thr Val Ser Trp Leu Gln Glu Asp Gln Tyr Asp His Leu Asp Ala Ala
                20              25                  30

Asp Met Thr Lys Val Glu Lys Ser Thr Asn Glu Ala Met Glu Trp Met
            35              40                  45

Asn Asn Lys Leu Asn Leu Gln Asn Lys Gln Ser Leu Thr Met Asp Pro
    50              55                  60

Val Val Lys Ser Lys Glu Ile Glu Ala Lys Ile Lys Glu Leu Thr Ser
  65              70                  75                  80

Thr Cys Ser Pro Ile Ile Ser Lys Pro Lys Pro Lys Val Glu Pro Pro
                85              90                  95

Lys Glu Glu Gln Lys Asn Ala Glu Gln Asn Gly Pro Val Asp Gly Gln
```

```
                 100                 105                 110
Gly Asp Asn Pro Gly Pro Gln Ala Ala Glu Gln Gly Thr Asp Thr Ala
         115                 120                 125
Val Leu Arg Ile Gln Thr Arg Ser Phe Leu Lys Trp Thr Leu Ile Asp
         130                 135                 140
Ser Asn Thr Cys Phe Tyr
145                 150
```

```
<210> 1434
<211> 145
<212> PRT
<213> Homo sapiens

<400> 1434
His Glu Val Val Glu His Asn Pro Ile Ser Val Leu Asp Ser Pro Ser
 1               5                  10                  15
Ser Asp Cys Phe Ala Glu Trp Pro Gly Glu Leu Gly Arg Gly Trp Met
             20                  25                  30
Asp Arg Asn Lys His Thr Glu Ser Glu Val Gln Gly Arg Trp Ser Ser
         35                  40                  45
Phe Ser Leu Cys Arg Val Arg Met Lys Leu Cys Ser Gly Pro Trp Lys
     50                  55                  60
Cys Pro Trp Gln Lys Pro Asn Pro Arg Phe Gln Gly Thr Leu Pro Ser
65                  70                  75                  80
Cys Glu Arg Glu Arg Asn Cys Gly Gln Gly Leu Gly Leu Glu Ala Gly
                 85                  90                  95
Arg Trp Asp His Ser Asp Thr Met Gln Asp Asn Arg Trp Gln Leu Gly
             100                 105                 110
Leu Lys Ile Lys Met Asn Tyr Met Ile Phe Asp Lys Leu Phe Asn Pro
             115                 120                 125
Trp Ser Leu His Phe Leu Tyr Lys Thr Gly Thr Ile Leu Ile Pro Thr
             130                 135                 140
Leu
145
```

```
<210> 1435
<211> 46
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (45)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1435
Ala Gly Ala Gln Trp His Asn His Ser Ser Leu Gln Pro Trp Asn Ser
 1               5                  10                  15

Gln Ala Gln Val Ile Leu Pro Ser Ala Pro Ala Arg Val Ala Gly Thr
            20                  25                  30

Pro Gly Met His His Tyr Asn Gln Leu Ile Phe Phe Xaa Phe
        35                  40                  45



<210> 1436
<211> 95
<212> PRT
<213> Homo sapiens

<400> 1436
Asn Ser Thr Met Ala Tyr Arg Gly Gln Gly Gln Lys Val Gln Lys Val
 1               5                  10                  15

Met Val Gln Pro Ile Asn Leu Ile Phe Arg Tyr Leu Gln Asn Arg Ser
            20                  25                  30

Arg Ile Gln Val Trp Leu Tyr Glu Gln Val Asn Met Arg Ile Glu Gly
        35                  40                  45

Cys Ile Ile Gly Phe Asp Glu Tyr Met Asn Leu Val Leu Asp Asp Ala
    50                  55                  60

Glu Glu Ile His Ser Lys Thr Lys Ser Arg Lys Gln Leu Gly Arg Ile
65                  70                  75                  80

Met Leu Lys Gly Asp Asn Ile Thr Leu Leu Gln Ser Val Ser Asn
                85                  90                  95



<210> 1437
<211> 113
<212> PRT
```

<213> Homo sapiens

<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1437
Gln Gly Ala Leu Gly Ser Pro Val Pro Val Ala Val Ala Pro Leu Thr
 1   5   10   15

Pro Pro Ser Xaa Cys Pro Ala Pro Pro Leu Arg Pro Pro His Thr Pro
             20   25   30

Leu Ala Leu Thr Thr Cys Ile Ser Pro Ala Cys Val His Pro Pro Gly
         35   40   45

Trp Leu Thr His Ser His Ser His Thr Gln Ile Ser Gly Thr Asn Gly
     50   55   60

Pro Arg Val Leu Arg Thr Pro Ala Gln Gly Leu Cys Arg Ser Leu Pro
 65   70   75   80

His Ala Phe Pro Ser Leu Thr Lys Pro Pro Ala Ala Ser Phe Lys Leu
                 85   90   95

Gly Ala Pro Ala Leu Gly Leu Ser Cys Ala Leu Phe Phe Phe Phe Phe
                100   105   110

Phe

<210> 1438
<211> 122
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1438
Phe Leu His Thr Phe Asn Cys Ser Trp Ser Leu Thr Ser Pro Gly Xaa
 1   5   10   15

Arg Asp Val Leu Lys Gly Ser Gln Leu Trp Gln Val Thr Asp Ser Trp
             20   25   30

```
Glu Met Glu Arg Thr Lys Glu Tyr Ser Ser Cys Leu Thr Phe Leu Pro
         35              40              45
Thr Ala Asp Ile Val Gln Ala Arg Val Met Glu Glu Leu Asn Leu Leu
         50              55              60
Ala Ser Gln Ala Ala Pro Ile Pro Thr Ser Gln Cys Thr Ala Pro Pro
 65              70              75              80
His Leu Phe Ser Pro Leu Ser Leu Thr Ser Pro Phe Ile Met Ser His
             85              90              95
Lys Ser Gly Thr Val Gly Ser His Tyr Asn Leu Leu Cys His Arg Asp
             100             105             110
Ser Ile Phe Leu Ile Ser Asn His Val Ser
         115             120
```

```
<210> 1439
<211> 323
<212> PRT
<213> Homo sapiens

<400> 1439
Phe Val Ser Pro Ala Ile Asp Ser Thr Arg Gly Asp Ser Ser Ser Leu
 1               5               10              15
Val Ala Glu Leu Gln Glu Lys Leu Gln Glu Glu Lys Ala Lys Phe Leu
             20              25              30
Glu Gln Leu Glu Glu Gln Glu Lys Arg Lys Asn Glu Glu Met Gln Asn
         35              40              45
Val Arg Thr Ser Leu Ile Ala Glu Gln Gln Thr Asn Phe Asn Thr Val
     50              55              60
Leu Thr Arg Glu Lys Met Arg Lys Glu Asn Ile Ile Asn Asp Leu Ser
 65              70              75              80
Asp Lys Leu Lys Ser Thr Met Gln Gln Gln Glu Arg Asp Lys Asp Leu
             85              90              95
Ile Glu Ser Leu Ser Glu Asp Arg Ala Arg Leu Leu Glu Glu Lys Lys
             100             105             110
Lys Leu Glu Glu Glu Val Ser Lys Leu Arg Ser Ser Ser Phe Val Pro
             115             120             125
Ser Pro Tyr Val Ala Thr Ala Pro Glu Leu Tyr Gly Ala Cys Ala Pro
```

```
            130                 135                 140

Glu Leu Pro Gly Glu Ser Asp Arg Ser Ala Val Glu Thr Ala Asp Glu
145                 150                 155                 160

Gly Arg Val Asp Ser Ala Met Glu Thr Ser Met Met Ser Val Gln Glu
                165                 170                 175

Asn Ile His Met Leu Ser Glu Glu Lys Gln Arg Ile Met Leu Leu Glu
                180                 185                 190

Arg Thr Leu Gln Leu Lys Glu Glu Glu Asn Lys Arg Leu Asn Gln Arg
            195                 200                 205

Leu Met Ser Gln Ser Met Ser Ser Val Ser Ser Arg His Ser Glu Lys
            210                 215                 220

Ile Ala Ile Arg Asp Phe Gln Val Gly Asp Leu Val Leu Ile Ile Leu
225                 230                 235                 240

Asp Glu Arg His Asp Asn Tyr Val Leu Phe Thr Val Ser Pro Thr Leu
                245                 250                 255

Tyr Phe Leu His Ser Glu Ser Leu Pro Ala Leu Asp Leu Lys Pro Gly
                260                 265                 270

Glu Gly Ala Ser Gly Ala Ser Arg Arg Pro Trp Val Leu Gly Lys Val
            275                 280                 285

Met Glu Lys Glu Tyr Cys Gln Ala Lys Lys Ala Gln Asn Arg Phe Lys
    290                 295                 300

Val Pro Leu Gly Thr Lys Phe Tyr Arg Val Lys Ala Val Ser Trp Asn
305                 310                 315                 320

Lys Lys Val
```

```
<210> 1440
<211> 459
<212> PRT
<213> Homo sapiens

<400> 1440
Thr Arg Trp Trp Gly Pro Val Leu Trp Ser Lys Ser Arg Pro Pro Gly
    1               5                   10                  15

Arg Thr Arg Gly Pro Ser Gly Trp Arg Val Gly Leu Thr Arg Thr Ser
                20                  25                  30
```

```
Arg Pro Ala Ser Pro Ser Ala Leu Arg Thr Gly Asp Gly Ser Ser Arg
        35              40                  45

Pro Gly Thr Pro Pro Ala Ser Pro Arg Val Phe Glu Val Arg Gly Gly
    50                  55                  60

Ser Gly Ala Ser Ala Arg Arg Ser Ala Arg Ser Leu Pro Ala Leu Glu
65                  70                  75                  80

Ser Ala Ile Met Asp Val Leu Ala Glu Ala Asn Gly Thr Phe Ala Leu
                85                  90                  95

Asn Leu Leu Lys Thr Leu Gly Lys Asp Asn Ser Lys Asn Val Phe Phe
            100                 105                 110

Ser Pro Met Ser Met Ser Cys Ala Leu Ala Met Val Tyr Met Gly Ala
            115                 120                 125

Lys Gly Asn Thr Ala Ala Gln Met Ala Gln Ile Leu Ser Phe Asn Lys
    130                 135                 140

Ser Gly Gly Gly Gly Asp Ile His Gln Gly Phe Gln Ser Leu Leu Thr
145                 150                 155                 160

Glu Val Asn Lys Thr Gly Thr Gln Tyr Leu Leu Arg Met Ala Asn Arg
                165                 170                 175

Leu Phe Gly Glu Lys Ser Cys Asp Phe Leu Ser Ser Phe Arg Asp Ser
            180                 185                 190

Cys Gln Lys Phe Tyr Gln Ala Glu Met Glu Glu Leu Asp Phe Ile Ser
    195                 200                 205

Ala Val Glu Lys Ser Arg Lys His Ile Asn Thr Trp Val Ala Glu Lys
    210                 215                 220

Thr Glu Gly Lys Ile Ala Glu Leu Leu Ser Pro Gly Ser Val Asp Pro
225                 230                 235                 240

Leu Thr Arg Leu Val Leu Val Asn Ala Val Tyr Phe Arg Gly Asn Trp
            245                 250                 255

Asp Glu Gln Phe Asp Lys Glu Asn Thr Glu Glu Arg Leu Phe Lys Val
            260                 265                 270

Ser Lys Asn Glu Glu Lys Pro Val Gln Met Met Phe Lys Gln Ser Thr
    275                 280                 285

Phe Lys Lys Thr Tyr Ile Gly Glu Ile Phe Thr Gln Ile Leu Val Leu
    290                 295                 300
```

```
Pro Tyr Val Gly Lys Glu Leu Asn Met Ile Ile Met Leu Pro Asp Glu
305             310             315             320

Thr Thr Asp Leu Arg Thr Val Glu Lys Glu Leu Thr Tyr Glu Lys Phe
            325             330             335

Val Glu Trp Thr Arg Leu Asp Met Met Asp Glu Glu Glu Val Glu Val
            340             345             350

Ser Leu Pro Arg Phe Lys Leu Glu Glu Ser Tyr Asp Met Glu Ser Val
            355             360             365

Leu Arg Asn Leu Gly Met Thr Asp Ala Phe Glu Leu Gly Lys Ala Asp
        370             375             380

Phe Ser Gly Met Ser Gln Thr Asp Leu Ser Leu Ser Lys Val Val His
385             390             395             400

Lys Ser Phe Val Glu Val Asn Glu Glu Gly Thr Glu Ala Ala Ala Ala
            405             410             415

Thr Ala Ala Ile Met Met Met Arg Cys Ala Arg Phe Val Pro Arg Phe
            420             425             430

Cys Ala Asp His Pro Phe Leu Phe Phe Ile Gln His Ser Lys Thr Asn
            435             440             445

Gly Ile Leu Phe Cys Gly Arg Phe Ser Ser Pro
    450             455


<210> 1441
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1441
Leu Val Glu Ala Leu Lys Leu Gln Glu Gln Leu Lys Ala Pro Val Lys
1               5               10              15

Thr Leu Ser Glu Gly Ile Lys Arg Lys Leu Cys Phe Val Leu Ser Ile
            20              25              30

Leu Gly Asn Pro Ser Val Val Leu Leu Asp Glu Leu Phe Thr Gly Met
            35              40              45

Asp Pro Glu Gly Gln Gln Gln Met Trp Gln Ile Leu Gln Ala Thr Ile
    50              55              60
```

```
Lys Asn Gln Glu Arg Gly Ala Leu Leu Thr Thr His Tyr Met Ser Glu
 65                  70                  75                  80

Ala Lys Ser Leu Cys Asp Arg Val Ala Ile Met Val Ser Gly Thr Leu
                 85                  90                  95

Arg Cys Ile Gly Ser Ile Gln Gln Leu Lys Ser Leu Val Lys Ile Ile
                100                 105                 110

Tyr
```

```
<210> 1442
<211> 839
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (291)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (295)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (683)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1442
Ala Glu His Trp Gly Ala Ile Pro Pro Ala Gly Gly Gly Ala Val Gly
 1               5                  10                  15

Ile Ser Glu Thr Phe Leu Gly Lys Lys Val Arg Thr Lys Thr Leu Ser
                20                  25                  30

Glu Asp Asp Leu Lys Glu Ile Pro Ala Glu Gln Met Asp Phe Arg Ala
             35                  40                  45

Asn Leu Gln Arg Gln Val Lys Pro Lys Thr Val Ser Glu Glu Glu Arg
         50                  55                  60

Lys Val His Ser Pro Gln Gln Val Asp Phe Arg Ser Val Leu Ala Lys
 65                  70                  75                  80

Lys Gly Thr Ser Lys Thr Pro Val Pro Glu Lys Val Pro Pro Pro Lys
```

```
                          85                      90                      95

      Pro Ala Thr Pro Asp Phe Arg Ser Val Leu Gly Gly Lys Lys Lys Leu
                      100                 105                 110

      Pro Ala Glu Asn Gly Ser Ser Ser Ala Glu Thr Leu Asn Ala Lys Ala
                  115                 120                 125

      Val Glu Ser Ser Lys Pro Leu Ser Asn Ala Gln Pro Ser Gly Pro Leu
              130                 135                 140

      Lys Pro Val Gly Asn Ala Lys Pro Ala Glu Thr Leu Lys Pro Met Gly
      145                 150                 155                 160

      Asn Ala Lys Pro Ala Glu Thr Leu Lys Pro Met Gly Asn Ala Lys Pro
                      165                 170                 175

      Asp Glu Asn Leu Lys Ser Ala Ser Lys Glu Glu Leu Lys Lys Asp Val
                  180                 185                 190

      Lys Asn Asp Val Asn Cys Lys Arg Gly His Ala Gly Thr Thr Asp Asn
                  195                 200                 205

      Glu Lys Arg Ser Glu Ser Gln Gly Thr Ala Pro Ala Phe Lys Gln Lys
              210                 215                 220

      Leu Gln Asp Val His Val Ala Glu Gly Lys Lys Leu Leu Leu Gln Cys
      225                 230                 235                 240

      Gln Val Ser Ser Asp Pro Pro Ala Thr Ile Ile Trp Thr Leu Asn Gly
                      245                 250                 255

      Lys Thr Leu Lys Thr Thr Lys Phe Ile Ile Leu Ser Gln Glu Gly Ser
                      260                 265                 270

      Leu Cys Ser Val Ser Ile Glu Lys Ala Leu Pro Glu Asp Arg Gly Leu
                  275                 280                 285

      Tyr Lys Xaa Val Ala Lys Xaa Asp Ala Gly Gln Ala Glu Cys Ser Cys
              290                 295                 300

      Gln Val Thr Val Asp Asp Ala Pro Ala Ser Glu Asn Thr Lys Ala Pro
      305                 310                 315                 320

      Glu Met Lys Ser Arg Arg Pro Lys Ser Ser Leu Pro Pro Val Leu Gly
                      325                 330                 335

      Thr Glu Ser Asp Ala Thr Val Lys Lys Lys Pro Ala Pro Lys Thr Pro
                  340                 345                 350

      Pro Lys Ala Ala Met Pro Pro Gln Ile Ile Gln Phe Pro Glu Asp Gln
```

```
                 355                      360                      365
      Lys Val Arg Ala Gly Glu Ser Val Glu Leu Phe Gly Lys Val Thr Gly
          370                      375                      380
      Thr Gln Pro Ile Thr Cys Thr Trp Met Lys Phe Arg Lys Gln Ile Gln
      385                      390                      395                      400
      Glu Ser Glu His Met Lys Val Glu Asn Ser Glu Asn Gly Ser Lys Leu
                          405                      410                      415
      Thr Ile Leu Ala Ala Arg Gln Glu His Cys Gly Cys Tyr Thr Leu Leu
                          420                      425                      430
      Val Glu Asn Lys Leu Gly Ser Arg Gln Ala Gln Val Asn Leu Thr Val
                          435                      440                      445
      Val Asp Lys Pro Asp Pro Pro Ala Gly Thr Pro Cys Ala Ser Asp Ile
                          450                      455                      460
      Arg Ser Ser Ser Leu Thr Leu Ser Trp Tyr Gly Ser Ser Tyr Asp Gly
      465                      470                      475                      480
      Gly Ser Ala Val Gln Ser Tyr Ser Ile Glu Ile Trp Asp Ser Ala Asn
                          485                      490                      495
      Lys Thr Trp Lys Glu Leu Ala Thr Cys Arg Ser Thr Ser Phe Asn Val
                          500                      505                      510
      Gln Asp Leu Leu Pro Asp His Glu Tyr Lys Phe Arg Val Arg Ala Ile
                          515                      520                      525
      Asn Val Tyr Gly Thr Ser Glu Pro Ser Gln Glu Ser Glu Leu Thr Thr
                          530                      535                      540
      Val Gly Glu Lys Pro Glu Glu Pro Lys Asp Glu Val Glu Val Ser Asp
      545                      550                      555                      560
      Asp Asp Glu Lys Glu Pro Glu Val Asp Tyr Arg Thr Val Thr Ile Asn
                          565                      570                      575
      Thr Glu Gln Lys Val Ser Asp Phe Tyr Asp Ile Glu Glu Arg Leu Gly
                          580                      585                      590
      Ser Gly Lys Phe Gly Gln Val Phe Arg Leu Val Glu Lys Lys Thr Arg
                          595                      600                      605
      Lys Val Trp Ala Gly Lys Phe Phe Lys Ala Tyr Ser Ala Lys Glu Lys
                          610                      615                      620
      Glu Asn Ile Arg Gln Glu Ile Ser Ile Met Asn Cys Leu His His Pro
```

```
      625                    630                    635                    640

    Lys Leu Val Gln Cys Val Asp Ala Phe Glu Glu Lys Ala Asn Ile Val
                    645                650                655

    Met Val Leu Glu Ile Val Ser Gly Gly Glu Leu Phe Glu Arg Ile Ile
                    660                665                670

    Asp Glu Asp Phe Glu Leu Thr Glu Arg Glu Xaa Ile Lys Tyr Met Arg
                    675                680                685

    Gln Ile Ser Glu Gly Val Glu Tyr Ile His Lys Gln Gly Ile Val His
        690                695                700

    Leu Asp Leu Lys Pro Glu Asn Ile Met Cys Val Asn Lys Thr Gly Thr
    705                710                715                720

    Arg Ile Lys Leu Ile Asp Phe Gly Leu Ala Arg Arg Leu Glu Asn Ala
                    725                730                735

    Gly Ser Leu Lys Val Leu Phe Gly Thr Pro Glu Phe Val Ala Pro Glu
                    740                745                750

    Val Ile Asn Tyr Glu Pro Ile Gly Tyr Ala Thr Asp Met Trp Ser Ile
                    755                760                765

    Gly Val Ile Cys Tyr Ile Leu Val Ser Gly Leu Ser Pro Phe Met Gly
        770                775                780

    Asp Asn Asp Asn Glu Thr Leu Ala Asn Val Thr Ser Ala Thr Trp Asp
    785                790                795                800

    Phe Asp Asp Glu Ala Phe Asp Glu Ile Ser Asp Asp Ala Lys Asp Phe
                    805                810                815

    Ile Ser Asn Leu Leu Lys Lys Asp Met Lys Asn Arg Leu Asp Cys Thr
                    820                825                830

    His Ala Phe Ser Ile His Gly
                    835
```

<210> 1443
<211> 111
<212> PRT
<213> Homo sapiens

<400> 1443
```
    Cys Ser Cys Thr Val Arg Ala Arg Arg Arg Leu Asn Arg Gly Leu Arg
        1           5               10              15
```

```
Arg Lys Gln His Ser Leu Leu Lys Arg Leu Arg Lys Ala Lys Lys Glu
              20              25              30

Ala Pro Pro Met Glu Lys Pro Glu Val Val Lys Thr His Leu Arg Asp
          35              40              45

Met Ile Ile Leu Pro Glu Met Val Gly Ser Met Val Gly Val Tyr Asn
          50              55              60

Gly Lys Thr Phe Asn Gln Val Glu Ile Lys Pro Glu Met Ile Gly His
  65              70              75              80

Tyr Leu Gly Glu Phe Ser Ile Thr Tyr Lys Pro Val Lys His Gly Arg
              85              90              95

Pro Gly Ile Gly Ala Thr His Ser Ser Arg Phe Ile Pro Leu Lys
              100             105             110
```

<210> 1444
<211> 531
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (446)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (474)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (502)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (504)
<223> Xaa equals any of the naturally occurring L-amino acids

```
<400> 1444
Glu Lys Ser Val Gln Xaa Ser Lys Arg Glu Ser Val Ser His Arg Ser
1               5                   10                  15


Pro Ser Pro Glu Pro Ile Tyr Asn Ser Glu Gly Lys Arg Leu Asn Thr
            20                  25                  30


Arg Glu Phe Arg Thr Arg Lys Lys Leu Glu Glu Glu Arg His Asn Leu
        35                  40                  45


Ile Thr Glu Met Val Ala Leu Asn Pro Asp Phe Lys Pro Pro Ala Asp
    50                  55                  60


Tyr Lys Pro Pro Ala Thr Arg Val Ser Asp Lys Val Met Ile Pro Gln
65                  70                  75                  80


Asp Glu Tyr Pro Glu Ile Asn Phe Val Gly Leu Leu Ile Gly Pro Arg
                85                  90                  95


Gly Asn Thr Leu Lys Asn Ile Glu Lys Glu Cys Asn Ala Lys Ile Met
            100                 105                 110


Ile Arg Gly Lys Gly Ser Val Lys Glu Gly Lys Val Gly Arg Lys Asp
        115                 120                 125


Gly Gln Met Leu Pro Gly Glu Asp Glu Pro Leu His Ala Leu Val Thr
        130                 135                 140


Ala Asn Thr Met Glu Asn Val Lys Lys Ala Val Glu Gln Ile Arg Asn
145                 150                 155                 160


Ile Leu Lys Gln Gly Ile Glu Thr Pro Glu Asp Gln Asn Asp Leu Arg
                165                 170                 175


Lys Met Gln Leu Arg Glu Leu Ala Arg Leu Asn Gly Thr Leu Arg Glu
                180                 185                 190


Asp Asp Asn Arg Ile Leu Arg Pro Trp Gln Ser Ser Glu Thr Arg Ser
            195                 200                 205


Ile Thr Asn Thr Thr Val Cys Thr Lys Cys Gly Gly Ala Gly His Ile
    210                 215                 220


Ala Ser Asp Cys Lys Phe Gln Arg Pro Gly Asp Pro Gln Ser Ala Gln
225                 230                 235                 240


Asp Lys Ala Arg Met Asp Lys Glu Tyr Leu Ser Leu Met Ala Glu Leu
                245                 250                 255


Gly Glu Ala Pro Val Pro Ala Ser Val Gly Ser Thr Ser Gly Pro Ala
                260                 265                 270
```

```
Thr Thr Pro Leu Ala Ser Ala Pro Arg Pro Ala Ala Pro Ala Asn Asn
        275                 280             285

Pro Pro Pro Pro Ser Leu Met Ser Thr Thr Gln Ser Arg Pro Pro Trp
    290                 295             300

Met Asn Ser Gly Pro Ser Glu Ser Arg Pro Tyr His Gly Met His Gly
305                 310             315                 320

Gly Gly Pro Gly Gly Pro Gly Gly Gly Pro His Ser Phe Pro His Pro
            325             330                 335

Leu Pro Ser Leu Thr Gly Gly His Gly Gly His Pro Met Gln His Asn
            340             345             350

Pro Asn Gly Pro Pro Pro Pro Trp Met Gln Pro Pro Pro Pro Pro Met
        355             360             365

Asn Gln Gly Pro His Pro Pro Gly His His Gly Pro Pro Pro Met Asp
370             375             380

Gln Tyr Leu Gly Ser Thr Pro Val Gly Ser Gly Val Tyr Arg Leu His
385             390             395                 400

Gln Gly Lys Gly Met Met Pro Pro Pro Met Gly Met Met Pro Pro
            405             410                 415

Pro Pro Pro Pro Pro Ser Gly Gln Pro Pro Pro Pro Ser Gly Pro
        420             425                 430

Leu Pro Pro Trp Gln Gln Gln Gln Gln Gln Pro Pro Pro Xaa Pro Pro
        435             440             445

Pro Ser Ser Ser Met Ala Ser Ser Thr Pro Leu Pro Trp Gln Gln Asn
    450             455             460

Thr Thr Thr Thr Thr Thr Ser Ala Gly Xaa Gly Ser Ile Pro Pro Trp
465             470             475                 480

Gln Gln Gln Gln Ala Ala Ala Ala Ala Ser Pro Gly Ala Pro Gln Met
            485             490             495

Gln Gly Asn Pro Thr Xaa Gly Xaa Met Ala Leu Leu Gln Trp Ile Ser
            500             505             510

Thr Trp Glu Val Arg Leu Trp Ala Leu Gly Ser Ile Ala Cys Ile Lys
        515             520             525

Glu Lys Val
    530
```

<210> 1445
<211> 99
<212> PRT
<213> Homo sapiens

<400> 1445
Ser Thr Cys Arg Val Val Glu Val Gly Lys Gln Gln Gly Thr Leu Tyr
1   5   10   15

Asn Ala Arg Gln Leu Gln Tyr Gly Lys Asn Gly Pro Gly Pro Trp Asp
            20   25   30

Lys Ile Arg Val Val Leu Thr Pro Arg Gly Arg Gly Gln Pro Ala Phe
            35   40   45

Arg Val Ala Ser Ser Val Pro Leu Gln Ser Asp Cys Val His Leu Val
    50   55   60

Gln Leu Met Ser Glu Ser Pro Ala Leu Gly Tyr Phe Ile Leu Val Arg
65   70   75   80

Thr Leu Thr Ser His Ile Gly Ser Ile Asn Ser Phe Gly Lys Glu Leu
            85   90   95

Ile Ser Phe

<210> 1446
<211> 65
<212> PRT
<213> Homo sapiens

<400> 1446
Gln Pro Pro Gln Thr Phe Trp Gln Ala Leu Gln Leu Cys Tyr Phe Ile
1   5   10   15

Gln Leu Ile Leu Gln Ile Glu Ser Asn Gly His Ser Val Ser Phe Gly
            20   25   30

Arg Met Asp Gln Tyr Leu Tyr Pro Tyr Tyr Arg Arg Asp Val Glu Leu
            35   40   45

Asn Gln Thr Leu Asp Arg Glu His Ala Ile Glu Met Cys Ile Ala Ala
    50   55   60

Gly

65

<210> 1447
<211> 189
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1447
Tyr Cys Ser Ala Ala Met Ala Glu Pro Gln Pro Pro Ser Gly Gly Leu
 1   5   10   15

Thr Asp Glu Ala Ala Leu Ser Cys Cys Ser Asp Ala Asp Pro Ser Thr
            20   25   30

Lys Asp Phe Leu Leu Gln Gln Thr Met Leu Arg Val Lys Asp Pro Lys
        35   40   45

Lys Ser Leu Asp Phe Tyr Thr Arg Val Leu Gly Met Thr Leu Ile Gln
    50   55   60

Lys Cys Asp Phe Pro Ile Met Lys Phe Ser Leu Tyr Phe Leu Ala Tyr
65   70   75   80

Glu Asp Lys Asn Asp Ile Pro Lys Glu Lys Asp Glu Lys Ile Ala Trp
            85   90   95

Ala Leu Ser Arg Lys Ala Thr Leu Glu Leu Thr His Asn Trp Gly Thr
            100   105   110

Glu Asp Asp Xaa Thr Gln Ser Tyr His Asn Gly Asn Ser Asp Pro Arg
        115   120   125

Gly Phe Gly His Ile Gly Ile Ala Val Pro Asp Val Tyr Ser Ala Cys
    130   135   140

Lys Arg Phe Glu Glu Leu Gly Val Lys Phe Val Lys Lys Pro Asp Asp
145   150   155   160

Gly Lys Met Lys Gly Leu Ala Phe Ile Gln Asp Pro Asp Gly Tyr Trp
            165   170   175

Ile Glu Ile Leu Asn Pro Asn Lys Met Ala Thr Leu Met
            180   185

```
<210> 1448
<211> 219
<212> PRT
<213> Homo sapiens

<400> 1448
Phe Glu Glu Arg Tyr Thr Phe Glu Ile Pro Phe Leu Glu Ala Gln Arg
 1               5               10              15

Arg Thr Leu Leu Leu Thr Val Val Asp Phe Asp Lys Phe Ser Arg His
            20              25              30

Cys Val Ile Gly Lys Val Ser Val Pro Leu Cys Glu Val Asp Leu Val
            35              40              45

Lys Gly Gly His Trp Trp Lys Ala Leu Ile Pro Ser Ser Gln Asn Glu
        50              55              60

Val Glu Leu Gly Glu Leu Leu Leu Ser Leu Asn Tyr Leu Pro Ser Ala
 65              70              75              80

Gly Arg Leu Asn Val Asp Val Ile Arg Ala Lys Gln Leu Leu Gln Thr
            85              90              95

Asp Val Ser Gln Gly Ser Asp Pro Phe Val Lys Ile Gln Leu Val His
            100             105             110

Gly Leu Lys Leu Val Lys Thr Lys Lys Thr Ser Phe Leu Arg Gly Thr
        115             120             125

Ile Asp Pro Phe Tyr Asn Glu Ser Phe Ser Phe Lys Val Pro Gln Glu
        130             135             140

Glu Leu Glu Asn Ala Ser Leu Val Phe Thr Val Phe Gly His Asn Met
145             150             155             160

Lys Ser Ser Asn Asp Phe Ile Gly Arg Ile Val Ile Gly Gln Tyr Ser
            165             170             175

Ser Gly Pro Ser Glu Thr Asn His Trp Arg Arg Met Leu Asn Thr His
            180             185             190

Arg Thr Ala Val Glu Gln Trp His Ser Leu Arg Ser Arg Ala Glu Cys
        195             200             205

Asp Arg Val Ser Pro Ala Ser Leu Glu Val Thr
    210             215
```

<210> 1449
<211> 44
<212> PRT.
<213> Homo sapiens

<400> 1449
Asp Trp Val Phe Lys Leu Ala Phe Val Asn Leu Ile Ala Leu Arg Leu
1   5   10   15

Pro Ser Asn Glu Lys Lys Ser Gln Asn Phe Tyr Leu Val Phe Val His
            20   25   30

Phe Leu Leu Lys Cys Asn His Met Ile Leu Val Cys
        35   40

<210> 1450
<211> 272
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (183)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1450
Ser Thr Pro Cys Trp Pro Leu Pro Pro Val Trp Leu Gly Cys Gly Glu
1   5   10   15

Met Cys Leu Cys Val Gln Val Pro Glu Arg Asp Ser Val Ser Ser Val
            20   25   30

Ser Ser Ala Thr Ser Ser Ser Ser Ser Ala His Ser Val Asp Ser Glu
        35   40   45

Asp Met Tyr Ala Asp Leu Ala Ser Pro Val Ser Ser Ala Ser Ser Arg
    50   55   60

Ser Pro Ala Pro Ala Gln Thr Arg Lys Glu Lys Gly Lys Ser Lys Lys
65   70   75   80

Glu Asp Gly Val Lys Glu Glu Lys Arg Lys Arg Asp Ser Ser Thr Gln
            85   90   95

Pro Pro Lys Ser Ala Lys Pro Pro Ala Gly Gly Lys Ser Ser Gln Gln
        100   105   110

Pro Ser Thr Pro Gln Gln Ala Pro Pro Gly Gln Pro Gln Gln Gly Thr

```
              115                 120                 125

Phe Val Ala His Lys Glu Ile Lys Leu Thr Leu Leu Asn Lys Ala Ala
    130                 135                 140

Asp Lys Gly Ser Arg Lys Arg Tyr Glu Pro Ser Asp Lys Asp Arg Gln
145                 150                 155                 160

Ser Pro Pro Pro Ala Lys Arg Pro Asn Thr Ser Pro Asp Arg Gly Ser
                165                 170                 175

Arg Asp Arg Lys Ser Gly Xaa Arg Leu Gly Ser Pro Lys Pro Glu Arg
            180                 185                 190

Gln Arg Gly Gln Asn Ser Lys Ala Pro Ala Ala Pro Ala Asp Arg Lys
        195                 200                 205

Arg Gln Leu Ser Pro Gln Ser Lys Ser Ser Ser Lys Val Thr Ser Val
    210                 215                 220

Pro Gly Lys Ala Ser Asp Pro Gly Ala Ala Ser Thr Lys Ser Gly Lys
225                 230                 235                 240

Ala Ser Thr Leu Ser Arg Arg Glu Glu Leu Leu Lys Gln Leu Lys Ala
            245                 250                 255

Val Glu Asp Ala Ile Ala Arg Lys Arg Ala Lys Ile Pro Gly Lys Ala
            260                 265                 270
```

<210> 1451
<211> 164
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (144)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE

<222> (150)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1451
```
Val Met Ala Ala Cys Arg Tyr Cys Cys Ser Cys Leu Arg Leu Arg Pro
 1               5                   10                  15

Leu Ser Asp Gly Pro Phe Leu Leu Pro Arg Arg Asp Arg Ala Leu Thr
            20                  25                  30

Gln Leu Gln Val Arg Ala Leu Trp Ser Ser Ala Gly Ser Arg Ala Val
        35                  40                  45

Ala Val Asp Leu Gly Asn Arg Lys Leu Glu Ile Ser Ser Gly Lys Leu
        50                  55                  60

Ala Arg Phe Ala Asp Gly Ser Ala Val Val Gln Ser Gly Asp Thr Ala
65                  70                  75                  80

Val Met Val Thr Ala Val Ser Lys Thr Lys Pro Ser Pro Ser Gln Phe
                85                  90                  95

Met Pro Leu Val Val Asp Tyr Arg Gln Lys Ala Ala Ala Ala Gly Arg
            100                 105                 110

Ile Pro Thr Asn Tyr Leu Arg Arg Glu Xaa Gly Thr Ser Asp Lys Glu
            115                 120                 125

Ile Leu Thr Ser Arg Ile Ile Asp Arg Ser Ile Arg Pro Leu Phe Xaa
        130                 135                 140

Ala Gly Tyr Phe Tyr Xaa Thr Gln Val Leu Cys Asn Leu Leu Ala Val
145                 150                 155                 160

Asp Gly Val Asn
```

<210> 1452
<211> 206
<212> PRT
<213> Homo sapiens

<400> 1452
```
Ala Asp Cys Val Phe Val Glu Asp Val Ala Val Val Cys Glu Glu Thr
 1               5                   10                  15

Ala Leu Ile Thr Arg Pro Gly Ala Pro Ser Arg Arg Lys Glu Val Asp
            20                  25                  30
```

```
Met Met Lys Glu Ala Leu Glu Lys Leu Gln Leu Asn Ile Val Glu Met
        35                  40                  45

Lys Asp Glu Asn Ala Thr Leu Asp Gly Gly Asp Val Leu Phe Thr Gly
        50                  55                  60

Arg Glu Phe Phe Val Gly Leu Ser Lys Arg Thr Asn Gln Arg Gly Ala
65                  70                  75                  80

Glu Ile Leu Ala Asp Thr Phe Lys Asp Tyr Ala Val Ser Thr Val Pro
                85                  90                  95

Val Ala Asp Gly Leu His Leu Lys Ser Phe Cys Ser Met Ala Gly Pro
            100                 105                 110

Asn Leu Ile Ala Ile Gly Ser Ser Glu Ser Ala Gln Lys Ala Leu Lys
            115                 120                 125

Ile Met Gln Gln Met Ser Asp His Arg Tyr Asp Lys Leu Thr Val Pro
        130                 135                 140

Asp Asp Ile Ala Ala Asn Cys Ile Tyr Leu Asn Ile Pro Asn Lys Gly
145                 150                 155                 160

His Val Leu Leu His Arg Thr Pro Glu Glu Tyr Pro Glu Ser Ala Lys
            165                 170                 175

Val Tyr Glu Lys Leu Lys Asp His Met Leu Ile Pro Val Ser Met Ser
            180                 185                 190

Glu Leu Glu Lys Val Asp Gly Leu Leu Thr Cys Cys Gln Phe
            195                 200                 205


<210> 1453
<211> 645
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (608)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1453
Ala His Ala Ser Gly Lys Lys Pro Pro Asn Arg Pro Gly Ile Thr Phe
  1             5               10                  15


Glu Ile Gly Ala Arg Leu Glu Ala Leu Asp Tyr Leu Gln Lys Trp Tyr
            20                  25                  30
```

```
Pro Ser Arg Ile Glu Lys Ile Asp Tyr Glu Glu Gly Lys Met Leu Val
        35                  40                  45

His Phe Glu Arg Trp Ser His Arg Tyr Asp Glu Trp Ile Tyr Trp Asp
    50                  55                  60

Ser Asn Arg Leu Arg Pro Leu Glu Arg Pro Ala Leu Arg Lys Glu Gly
65                  70                  75                  80

Leu Lys Asp Glu Glu Asp Phe Phe Asp Phe Lys Ala Gly Glu Glu Val
                85                  90                  95

Leu Ala Arg Trp Thr Asp Cys Arg Tyr Tyr Pro Ala Lys Ile Glu Ala
            100                 105                 110

Ile Asn Lys Glu Gly Thr Phe Thr Val Gln Phe Tyr Asp Gly Val Ile
        115                 120                 125

Arg Cys Leu Lys Arg Met His Ile Lys Ala Met Pro Glu Asp Ala Lys
    130                 135                 140

Gly Gln Asp Trp Ile Ala Leu Val Lys Ala Ala Ala Ala Ala Ala Ala
145                 150                 155                 160

Lys Asn Lys Thr Gly Ser Lys Pro Arg Thr Ser Ala Asn Ser Asn Lys
                165                 170                 175

Asp Lys Asp Lys Asp Glu Arg Lys Trp Phe Lys Val Pro Ser Lys Lys
            180                 185                 190

Glu Glu Thr Ser Thr Cys Ile Ala Thr Pro Asp Val Glu Lys Lys Glu
        195                 200                 205

Asp Leu Pro Thr Ser Ser Glu Thr Phe Gly Leu His Val Glu Asn Val
    210                 215                 220

Pro Lys Met Val Phe Pro Gln Pro Glu Ser Thr Leu Ser Asn Lys Arg
225                 230                 235                 240

Lys Asn Asn Gln Gly Asn Ser Phe Gln Ala Lys Arg Ala Arg Leu Asn
                245                 250                 255

Lys Ile Thr Gly Leu Leu Ala Ser Lys Ala Val Gly Val Asp Gly Ala
            260                 265                 270

Glu Lys Lys Glu Asp Tyr Asn Glu Thr Ala Pro Met Leu Glu Gln Ala
        275                 280                 285

Ile Ser Pro Lys Pro Gln Ser Gln Lys Lys Asn Glu Ala Asp Ile Ser
    290                 295                 300
```

Ser Ser Ala Asn Thr Gln Lys Pro Ala Leu Leu Ser Ser Thr Leu Ser
305   310   315   320

Ser Gly Lys Ala Arg Ser Lys Lys Cys Lys His Glu Ser Gly Asp Ser
            325   330   335

Ser Gly Cys Ile Lys Pro Pro Lys Ser Pro Leu Ser Pro Glu Leu Ile
            340   345   350

Gln Val Glu Asp Leu Thr Leu Val Ser Gln Leu Ser Ser Ser Val Ile
            355   360   365

Asn Lys Thr Ser Pro Pro Gln Pro Val Asn Pro Pro Arg Pro Phe Lys
    370   375   380

His Ser Glu Arg Arg Arg Arg Ser Gln Arg Leu Ala Thr Leu Pro Met
385   390   395   400

Pro Asp Asp Ser Val Glu Lys Val Ser Ser Pro Ser Pro Ala Thr Asp
            405   410   415

Gly Lys Val Phe Ser Ile Ser Ser Gln Asn Gln Gln Glu Ser Ser Val
            420   425   430

Pro Glu Val Pro Asp Val Ala His Leu Pro Leu Glu Lys Leu Gly Pro
            435   440   445

Cys Leu Pro Leu Asp Leu Ser Arg Gly Ser Glu Val Thr Ala Pro Val
    450   455   460

Ala Ser Asp Ser Ser Tyr Arg Asn Glu Cys Pro Arg Ala Glu Lys Glu
465   470   475   480

Asp Thr Gln Met Leu Pro Asn Pro Ser Ser Lys Ala Ile Ala Asp Gly
            485   490   495

Arg Gly Ala Pro Ala Ala Ala Gly Ile Ser Lys Thr Glu Lys Lys Val
            500   505   510

Lys Leu Glu Asp Lys Ser Ser Thr Ala Phe Gly Lys Arg Lys Glu Lys
            515   520   525

Asp Lys Glu Arg Arg Glu Lys Arg Asp Lys Asp His Tyr Arg Pro Lys
    530   535   540

Gln Lys Lys Lys Lys Lys Lys Lys Lys Ser Lys Gln His Asp Tyr
545   550   555   560

Ser Asp Tyr Glu Asp Ser Ser Leu Glu Phe Leu Glu Arg Cys Ser Ser
            565   570   575

```
Pro Leu Thr Arg Ser Ser Gly Ser Ser Leu Ala Ser Arg Ser Met Phe
        580             585             590

Thr Glu Lys Thr Thr Thr Tyr Gln Tyr Pro Arg Ala Ile Leu Ser Xaa
        595             600             605

Asp Leu Ser Gly Glu Ser Met Cys Asn His Val Met Val Lys Thr Arg
    610             615             620

Leu Thr Ile Pro Lys Cys Val Thr Glu Asn Lys Thr Tyr Ser Val Lys
625             630             635             640

Ser Met Arg Phe Lys
            645
```

<210> 1454
<211> 69
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1454

```
Leu Val Ile Tyr Ser Trp His Xaa Phe Phe Ser Phe Gly Phe Ala Trp
 1           5               10              15

Leu Phe Leu Gln Val Leu Ser Arg Tyr His Ser Ala Asn His Cys Tyr
            20              25              30

Arg Met Val Thr Ser Phe Val Leu Thr Val Gln Gln Gln Ile Trp Val
            35              40              45

Arg Leu Asn Leu Ser Val Asn Phe Phe Phe Trp Cys Phe Phe Gly Leu
    50              55              60

Met Thr Val Ser Leu
 65
```

<210> 1455
<211> 230
<212> PRT
<213> Homo sapiens

```
<220>
<221> SITE
<222> (150)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (152)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1455
Leu Ala Gly Pro Arg Arg Trp Arg Val Ser Arg Pro Glu Ala Tyr Arg
 1               5               10              15

Ser Arg Trp Arg Gly Arg Ala Gly Gln Gly Phe Gly Leu Arg Arg Arg
            20              25              30

Glu Met Ala Ala Gly Gly Arg Met Glu Asp Gly Ser Leu Asp Ile Thr
        35              40              45

Gln Ser Ile Glu Asp Asp Pro Leu Leu Asp Ala Gln Leu Leu Pro His
    50              55              60

His Ser Leu Gln Ala His Phe Arg Pro Arg Phe His Pro Leu Pro Thr
65              70              75              80

Val Ile Ile Val Asn Leu Leu Trp Phe Ile His Leu Val Phe Val Val
            85              90              95

Leu Ala Phe Leu Thr Gly Val Leu Cys Ser Tyr Pro Asn Pro Asn Glu
        100             105             110

Asp Lys Cys Pro Gly Asn Tyr Thr Asn Pro Leu Lys Val Gln Thr Val
        115             120             125

Ile Ile Leu Gly Lys Val Ile Leu Trp Ile Leu His Leu Leu Leu Glu
    130             135             140

Cys Tyr Ile Gln Tyr Xaa His Xaa Lys Ile Arg Asn Arg Gly Tyr Asn
145             150             155             160

Leu Ile Tyr Arg Ser Thr Arg His Leu Lys Arg Leu Ala Leu Met Ile
            165             170             175

Gln Ser Ser Gly Asn Thr Val Leu Leu Leu Ile Leu Cys Met Gln His
        180             185             190

Ser Phe Pro Glu Pro Gly Arg Leu Tyr Leu Asp Leu Ile Leu Ala Ile
        195             200             205

Leu Ala Leu Glu Leu Ile Cys Ser Leu Ile Cys Leu Leu Ile Tyr Thr
```

```
            210                    215                    220

       Val Lys Ile Pro Glu Ile
       225                230




       <210> 1456
       <211> 71
       <212> PRT
       <213> Homo sapiens

       <220>
       <221> SITE
       <222> (10)
       <223> Xaa equals any of the naturally occurring L-amino acids

       <400> 1456
       Phe Phe Phe Phe Phe Ser Ile Ile Phe Xaa Gln Lys Gly Lys Lys Pro
         1                   5                  10                  15


       Phe Lys Ser Leu Arg Asn Leu Lys Ile Asp Leu Asp Leu Thr Ala Glu
                       20                  25                  30


       Gly Asp Leu Asn Ile Ile Met Ala Leu Ala Glu Lys Ile Lys Pro Gly
                   35                  40                  45


       Leu His Ser Phe Ile Phe Gly Arg Pro Phe Tyr Thr Ser Val Gln Glu
                   50                  55                  60


       Arg Asp Val Leu Met Thr Phe
       65                  70




       <210> 1457
       <211> 51
       <212> PRT
       <213> Homo sapiens

       <400> 1457
       Glu Tyr Asn Ser Val Asn Ala Asn Met Ile Ala Thr Leu Phe Thr Ser
         1                   5                  10                  15


       Leu Leu Leu Arg Pro Pro Pro Asn Leu Met Ala Arg Gln Thr Pro Ser
                       20                  25                  30


       Asp Arg Gln Arg Ala Ile Gln Phe Leu Leu Gly Phe Leu Leu Gly Ser
                   35                  40                  45


       Glu Glu Asp
```

50

<210> 1458
<211> 260
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (84)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1458
Pro Arg Leu Xaa Gly Asp Phe Val Ile Arg Pro Pro Gly Ser Gly Glu
 1   5   10   15

Lys Glu Pro His Pro Phe Ser Leu Cys His His Phe Gly His Pro Ala
            20   25   30

Gly Leu Val Leu Gly Phe Ala Leu Thr Ser Arg Lys Asp Ala Asn Pro
          35   40   45

Ser Leu Thr Pro Ala Arg Ala Ala Thr Cys Leu Cys Arg Gly Asp Pro
    50   55   60

Ser Leu Met Thr Leu Arg Cys Leu Glu Pro Ser Gly Asn Gly Gly Glu
 65   70   75   80

Gly Thr Arg Xaa Gln Trp Gly Thr Ala Gly Ser Ala Glu Glu Pro Ser
                85   90   95

Pro Gln Ala Ala Arg Leu Ala Lys Ala Leu Arg Glu Leu Gly Gln Thr
            100   105   110

Gly Trp Tyr Trp Gly Ser Met Thr Val Asn Glu Ala Lys Glu Lys Leu
          115   120   125

Lys Glu Ala Pro Glu Gly Thr Phe Leu Ile Arg Asp Ser Ser His Ser
    130   135   140

Asp Tyr Leu Leu Thr Ile Ser Val Lys Thr Ser Ala Gly Pro Thr Asn
145   150   155   160

Leu Arg Ile Glu Tyr Gln Asp Gly Lys Phe Arg Leu Asp Ser Ile Ile

```
                165                 170                 175
  Cys Val Lys Ser Lys Leu Lys Gln Phe Asp Ser Val Val His Leu Ile
          180                 185                 190

  Asp Tyr Tyr Val Gln Met Cys Lys Asp Lys Arg Thr Gly Pro Glu Ala
          195                 200                 205

  Pro Arg Asn Gly Thr Val His Leu Tyr Leu Thr Lys Pro Leu Tyr Thr
      210                 215                 220

  Ser Ala Pro Ser Leu Gln His Leu Cys Arg Leu Thr Ile Asn Lys Cys
  225                 230                 235                 240

  Thr Gly Ala Ile Trp Gly Leu Pro Leu Pro Thr Arg Leu Lys Asp Tyr
                  245                 250                 255

  Leu Gly Arg Ile
                  260
```

```
<210> 1459
<211> 145
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1459
Ala Glu Arg Ser Thr Cys Ser Arg Ser Arg Xaa Ala Arg Ala Ala Ala
  1               5                 10                  15

Pro Leu Pro Gly Gly Lys Gly Ser Gly Ile Phe Asp Glu Ser Thr Pro
                20                  25                  30

Val Gln Thr Arg Gln His Leu Asn Pro Pro Gly Gly Lys Thr Ser Asp
                35                  40                  45

Ile Phe Gly Ser Pro Val Thr Ala Thr Ser Arg Leu Ala His Pro Asn
      50                  55                  60

Lys Pro Lys Asp His Val Phe Leu Cys Glu Gly Glu Glu Pro Lys Ser
  65                  70                  75                  80

Asp Leu Lys Ala Ala Arg Ser Ile Pro Ala Gly Ala Glu Pro Gly Glu
                85                  90                  95
```

```
Lys Gly Ser Ala Arg Lys Ala Gly Pro Ala Lys Glu Gln Glu Pro Met
            100             105             110

Pro Thr Val Asp Ser His Glu Pro Arg Leu Gly Pro Arg Pro Arg Ser
            115             120             125

His Asn Lys Val Leu Asn Pro Pro Gly Gly Lys Ser Ser Ile Ser Phe
            130             135             140

Tyr
145
```

```
<210> 1460
<211> 113
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1460
Pro Ser Ile Tyr Asp Ile Leu Leu Leu Ile Ile Leu Trp Leu Xaa Ser
 1           5               10              15

Arg Met Asp Val Glu Ser Cys Ser Gln Arg Glu Asp Arg Leu Lys Arg
            20              25              30

Ala Xaa Ser Ala Lys Ser Ala Asn Ala Cys Asn Asn Cys Lys Cys Ser
        35              40              45

Val Ala Thr Cys Arg Leu Asn Ser Ala Gly Pro Glu Phe Cys Ile Arg
    50              55              60

Gly Leu Gly Tyr Ser Pro Asp Lys Gly Trp Arg His Arg Met Leu Glu
65              70              75              80

Phe Ser Gly His Ser Gly Lys Gly Pro Leu Cys Arg Ala Val Thr Val
            85              90              95

Ser Cys Pro Ile Gly Pro Phe Pro Pro Val Lys Cys Lys Ser Gln Glu
            100             105             110
```

Ser

<210> 1461
<211> 268
<212> PRT
<213> Homo sapiens

<400> 1461
Thr Thr Phe Arg Ala Lys Pro Gly Cys Cys Cys Ser Gly Gly Glu Asp
 1   5   10   15

Arg Gly Thr Ala Met Ala Glu Ser Ser Glu Ser Phe Thr Met Ala Ser
                20   25   30

Ser Pro Ala Gln Arg Arg Arg Gly Asn Asp Pro Leu Thr Ser Ser Pro
            35   40   45

Gly Arg Ser Ser Arg Arg Thr Asp Ala Leu Thr Ser Ser Pro Gly Arg
        50   55   60

Asp Leu Pro Pro Phe Glu Asp Glu Ser Glu Gly Leu Leu Gly Thr Glu
 65   70   75   80

Gly Pro Leu Glu Glu Glu Glu Asp Gly Glu Glu Leu Ile Gly Asp Gly
                85   90   95

Met Glu Arg Asp Tyr Arg Ala Ile Pro Glu Leu Asp Ala Tyr Glu Ala
                100   105   110

Glu Gly Leu Ala Leu Asp Asp Glu Asp Val Glu Glu Leu Thr Ala Ser
            115   120   125

Gln Arg Glu Ala Ala Glu Arg Ala Met Arg His Val Thr Gly Arg Leu
        130   135   140

Ala Gly Ala Trp Ala Ala Cys Ala Val Gly Ser Cys Met Thr Ala Met
145   150   155   160

Arg Arg Thr Arg Ser Ala Leu Pro Ala Ser Ala Ala Ser Gly Ala Ala
                165   170   175

Thr Glu Asp Gly Glu Glu Asp Glu Glu Met Ile Glu Ser Ile Glu Asn
                180   185   190

Leu Glu Asp Leu Lys Gly His Ser Val Arg Glu Trp Val Ser Met Ala
            195   200   205

Gly Pro Arg Leu Glu Ile His His Arg Phe Lys Asn Phe Leu Arg Thr

```
       210                215                220

His Val Asp Ser His Gly His Asn Val Phe Lys Glu Arg Ile Ser Asp
225                230                235                240

Met Cys Lys Glu Asn Arg Glu Ser Leu Val Val Asn Tyr Glu Asp Thr
                 245                250                255

Gly Ser Gln Gly Ala Arg Ala Gly Leu Leu Pro Ala
                 260                265
```

```
<210> 1462
<211> 393
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (149)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1462
Lys Ile Arg Lys Gln Ile Asn Ile Asn Asn Pro Phe Val Phe Lys His
  1               5                10                15

Ile Ser Asn Leu Lys Ser Met Asp His Phe Asp Asp Ile Gly Pro Ser
                 20                25                30

Val Val Met Ala Ser Pro Gly Met Met Gln Ser Gly Leu Ser Arg Glu
                 35                40                45

Leu Phe Glu Ser Trp Cys Thr Asp Lys Arg Asn Gly Val Ile Ile Ala
     50                55                60

Gly Tyr Cys Val Glu Gly Thr Leu Ala Lys His Ile Met Ser Glu Pro
 65                70                75                80

Glu Glu Ile Thr Thr Met Ser Gly Gln Lys Leu Pro Leu Lys Met Ser
                 85                90                95

Val Asp Tyr Ile Ser Phe Ser Ala His Thr Asp Tyr Gln Gln Thr Ser
                 100               105               110

Glu Phe Ile Arg Ala Leu Lys Pro Pro His Val Ile Leu Val His Gly
                 115               120               125

Glu Gln Asn Glu Met Ala Arg Leu Lys Ala Ala Leu Ile Arg Glu Tyr
                 130               135               140
```

```
Glu Asp Asn Asp Xaa Val His Ile Glu Val His Asn Pro Arg Asn Thr
145             150              155              160

Glu Ala Val Thr Leu Asn Phe Arg Gly Glu Lys Leu Ala Lys Val Met
            165              170              175

Gly Phe Leu Ala Asp Lys Lys Pro Glu Gln Gly Gln Arg Val Ser Gly
            180              185              190

Ile Leu Val Lys Arg Asn Phe Asn Tyr His Ile Leu Ser Pro Cys Asp
        195              200              205

Leu Ser Asn Tyr Thr Asp Leu Ala Met Ser Thr Val Lys Gln Thr Gln
    210              215              220

Ala Ile Pro Tyr Thr Gly Pro Phe Asn Leu Leu Cys Tyr Gln Leu Gln
225              230              235              240

Lys Leu Thr Gly Asp Val Glu Glu Leu Glu Ile Gln Glu Lys Pro Ala
            245              250              255

Leu Lys Val Phe Lys Asn Ile Thr Val Ile Gln Glu Pro Gly Met Val
            260              265              270

Val Leu Glu Trp Leu Ala Asn Pro Ser Asn Asp Met Tyr Ala Asp Thr
    275              280              285

Val Thr Thr Val Ile Leu Glu Val Gln Ser Asn Pro Lys Ile Arg Lys
    290              295              300

Gly Ala Val Gln Lys Val Ser Lys Lys Leu Glu Met His Val Tyr Ser
305              310              315              320

Lys Arg Leu Glu Ile Met Leu Gln Asp Ile Phe Gly Glu Asp Cys Val
            325              330              335

Ser Val Lys Asp Asp Ser Ile Leu Ser Val Thr Val Asp Gly Lys Thr
            340              345              350

Ala Asn Leu Asn Leu Glu Thr Arg Thr Val Glu Cys Glu Glu Gly Ser
        355              360              365

Glu Asp Asp Glu Ser Leu Arg Glu Met Val Glu Leu Ala Ala Gln Arg
    370              375              380

Leu Tyr Glu Ala Leu Thr Pro Val His
385              390
```

<210> 1463

<211> 163
<212> PRT
<213> Homo sapiens

<400> 1463
Leu Leu Asp Phe Pro Ala Leu Pro Lys Phe Val Leu Ala Gln Ser Pro
1   5   10   15

Lys Ala Gly Lys Pro Ser Thr Met Thr Ser Met Thr Gln Ser Leu Arg
                20   25   30

Glu Val Ile Lys Ala Met Thr Lys Ala Arg Asn Phe Glu Arg Val Leu
            35   40   45

Gly Lys Ile Thr Leu Val Ser Ala Ala Pro Gly Lys Val Ile Cys Glu
        50   55   60

Met Lys Val Glu Glu Glu His Thr Asn Ala Ile Gly Thr Leu His Gly
65   70   75   80

Gly Leu Thr Ala Thr Leu Val Asp Asn Ile Ser Thr Met Ala Leu Leu
                85   90   95

Cys Thr Glu Arg Gly Ala Pro Gly Val Ser Val Asp Met Asn Ile Thr
            100   105   110

Tyr Met Ser Pro Ala Lys Leu Gly Glu Asp Ile Val Ile Thr Ala His
            115   120   125

Val Leu Lys Gln Gly Lys Thr Leu Ala Phe Thr Ser Val Asp Leu Thr
            130   135   140

Asn Lys Ala Thr Gly Lys Leu Ile Ala Gln Gly Arg His Thr Lys His
145   150   155   160

Leu Gly Asn

<210> 1464
<211> 94
<212> PRT
<213> Homo sapiens

<400> 1464
Trp Cys Cys Phe Arg Thr Val Phe Ser Tyr Pro Phe Arg Leu Val Phe
1   5   10   15

Cys Met Arg His His Cys Lys Lys Ile Leu Ser Leu Gln Lys Tyr Phe
                20   25   30

Ile Thr Lys Glu Gln Lys Gln Lys Lys Leu Lys Leu His Trp Leu Lys
        35   40   45

Tyr Ser Phe Gln Gln Leu Ser Phe Leu Ser Thr Leu Met Ala Thr Pro
        50   55   60

Pro Arg Val Glu Val Thr Val Val Cys Thr Gln Val Val Pro Ile Lys
65   70   75   80

Thr Pro Ser Phe Glu Pro Asn Tyr Val His Phe Val Ile Asp
                85   90

<210> 1465
<211> 183
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1465
Gln Val Glu Ile His Tyr Xaa Phe Asp Thr Leu Ile Glu Trp Trp Arg
    1   5   10   15

Glu Lys Asn Gly Ser Xaa Cys Ser Xaa Leu Ile Ile Val Leu Asp Ser
                20   25   30

Glu Asn Ser Thr Pro Trp Val Lys Glu Val Arg Lys Ile Asn Asp Gln
            35   40   45

Tyr Ile Ala Val Gln Gly Ala Glu Leu Ile Lys Thr Val Asp Ile Glu
    50   55   60

Glu Ala Asp Pro Pro Gln Leu Gly Asp Phe Thr Lys Asp Trp Val Glu
    65   70   75   80

```
Tyr Asn Cys Asn Ser Ser Asn Asn Ile Cys Trp Thr Glu Lys Gly Arg
            85                  90                  95

Thr Val Lys Ala Val Tyr Gly Val Ser Lys Arg Trp Ser Asp Tyr Thr
            100                 105             110

Leu His Leu Pro Thr Gly Ser Asp Val Ala Lys His Trp Met Leu His
            115                 120             125

Phe Pro Arg Ile Thr Tyr Pro Leu Val His Leu Ala Asn Trp Leu Cys
        130             135             140

Gly Leu Asn Leu Phe Trp Ile Cys Lys Thr Cys Phe Arg Cys Leu Lys
145             150             155             160

Arg Leu Lys Met Ser Trp Phe Leu Pro Thr Val Leu Asp Thr Gly Gln
            165             170             175

Gly Phe Lys Leu Val Lys Ser
            180


<210> 1466
<211> 146
<212> PRT
<213> Homo sapiens

<400> 1466
Arg Asp Gly Val Trp Ser Val Gln Val Arg Gly Gln Gly Glu Val Glu
 1           5               10              15

Asn Gly Arg Cys Ile Thr Lys Leu Glu Asn Met Gly Phe Arg Val Gly
            20              25              30

Gln Gly Leu Ile Glu Arg Phe Thr Lys Asp Thr Ala Arg Phe Lys Asp
        35              40              45

Glu Leu Asp Ile Met Lys Phe Ile Cys Lys Asp Phe Trp Thr Thr Val
        50              55              60

Phe Lys Lys Gln Ile Asp Asn Leu Arg Thr Asn His Gln Gly Ile Tyr
65              70              75              80

Val Leu Gln Asp Asn Lys Phe Arg Leu Leu Thr Gln Met Ser Ala Gly
            85              90              95

Lys Gln Tyr Leu Glu His Ala Ser Lys Tyr Leu Ala Phe Thr Cys Gly
            100             105             110

Leu Ile Arg Gly Gly Leu Ser Asn Leu Gly Ile Lys Ser Ile Val Thr
```

```
                115                   120                   125

       Ala Glu Val Ser Ser Met Pro Ala Cys Lys Phe Gln Val Met Ile Gln
           130                   135                   140

       Lys Leu
       145
```

<210> 1467
<211> 277
<212> PRT
<213> Homo sapiens

<400> 1467

```
       Ile Arg His Ser His Thr Gly Gln Gly Ser Cys Trp Val Ala Thr Leu
        1               5                   10                  15

       Ala Ser Ala Met Ile Pro Pro Ala Asp Ser Leu Leu Lys Tyr Asp Thr
                       20                  25                  30

       Pro Val Leu Val Ser Arg Asn Thr Glu Lys Arg Ser Pro Lys Ala Arg
                   35                  40                  45

       Leu Leu Lys Val Ser Pro Gln Gln Pro Gly Pro Ser Gly Ser Ala Pro
           50                  55                  60

       Gln Pro Pro Lys Thr Lys Leu Pro Ser Thr Pro Cys Val Pro Asp Pro
        65                  70                  75                  80

       Thr Lys Gln Ala Glu Glu Ile Leu Asn Ala Ile Leu Pro Pro Arg Glu
                           85                  90                  95

       Trp Val Glu Asp Thr Gln Leu Trp Ile Gln Gln Val Ser Ser Thr Pro
                   100                 105                 110

       Ser Thr Arg Met Asp Val Val His Leu Gln Glu Gln Leu Asp Leu Lys
                   115                 120                 125

       Leu Gln Gln Arg Gln Ala Arg Glu Thr Gly Ile Cys Pro Val Arg Arg
           130                 135                 140

       Glu Leu Tyr Ser Gln Cys Phe Asp Glu Leu Ile Arg Glu Val Thr Ile
       145                 150                 155                 160

       Asn Cys Ala Glu Arg Gly Leu Leu Leu Leu Arg Val Arg Asp Glu Ile
                       165                 170                 175

       Arg Met Thr Ile Ala Ala Tyr Gln Thr Leu Tyr Glu Ser Ser Val Ala
                   180                 185                 190
```

```
Phe Gly Met Arg Lys Ala Leu Gln Ala Glu Gln Gly Lys Ser Asp Met
        195             200             205

Glu Arg Lys Ile Ala Glu Leu Glu Thr Glu Lys Arg Asp Leu Glu Arg
        210             215             220

Gln Val Asn Glu Gln Lys Ala Lys Cys Glu Ala Thr Glu Lys Arg Glu
225             230             235             240

Ser Glu Arg Arg Gln Val Glu Glu Lys Lys His Asn Glu Glu Ile Gln
            245             250             255

Phe Leu Lys Arg Thr Asn Gln Gln Leu Lys Ala Gln Leu Glu Gly Ile
        260             265             270

Ile Ala Pro Lys Lys
        275


<210> 1468
<211> 263
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1468
Arg Pro Ala Ala Ala Xaa Ser Gly Gly Thr Gly Ser Gly Arg Gly Ser
  1             5             10             15

Arg Pro Glu Pro Ser Arg Ala Glu Pro Ser Arg Ser Gly Arg Arg Arg
            20             25             30

Pro Ala Arg Arg Ala Ala Thr Met Ser Val Phe Gly Lys Leu Phe Gly
        35             40             45

Ala Gly Gly Gly Lys Ala Gly Lys Gly Gly Pro Thr Pro Gln Glu Ala
    50             55             60

Ile Gln Arg Leu Arg Asp Thr Glu Glu Met Leu Ser Lys Lys Gln Glu
65             70             75             80

Phe Leu Glu Lys Lys Ile Glu Gln Glu Leu Thr Ala Ala Lys Lys His
            85             90             95

Gly Thr Lys Asn Lys Arg Ala Ala Leu Gln Ala Leu Lys Arg Lys Lys
```

```
                      100                      105                      110

        Arg Tyr Glu Lys Gln Leu Ala Gln Ile Asp Gly Thr Leu Ser Thr Ile
                    115                  120                  125

        Glu Phe Gln Arg Glu Ala Leu Glu Asn Ala Asn Thr Asn Thr Glu Val
                    130              135                  140

        Leu Lys Asn Met Gly Tyr Ala Ala Lys Ala Met Lys Ala Ala His Asp
        145                  150                  155                  160

        Asn Met Asp Ile Asp Lys Val Asp Glu Leu Met Gln Asp Ile Ala Asp
                            165                  170                  175

        Gln Gln Glu Leu Ala Glu Glu Ile Ser Thr Ala Ile Ser Lys Pro Val
                    180                  185                  190

        Gly Phe Gly Glu Glu Phe Asp Glu Asp Glu Leu Met Ala Glu Leu Glu
                    195              200                  205

        Glu Leu Glu Gln Glu Glu Leu Asp Lys Asn Leu Leu Glu Ile Ser Gly
                    210              215                  220

        Pro Glu Thr Val Pro Leu Pro Asn Val Pro Ser Ile Ala Leu Pro Ser
        225                  230                  235                  240

        Lys Pro Ala Lys Lys Lys Glu Glu Glu Asp Asp Asp Met Lys Glu Leu
                            245                  250                  255

        Glu Asn Trp Ala Gly Ser Met
                    260
```

```
<210> 1469
<211> 192
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (101)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (118)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1469
Phe Arg Pro Trp Thr Leu Asp Leu Val Asp Glu Gly His Trp Pro Gly
```

```
           1                5                    10                   15

           Pro Arg Val Phe Gly Gly Arg Arg Gly Leu Ala Trp Val Pro Thr Gly
                        20              25              30

           Cys Leu Thr Ser Ser Cys Ser Leu His Leu Gly Cys Val Gly Gln Gly
                        35              40              45

           Leu Cys Cys His Ser Arg Asn Arg Phe Ser Ser Val Gly Leu Pro Phe
                    50              55              60

           Leu His Pro Gly Leu Lys Trp Met Pro Asp Ala Asn Pro Ser Ser Gly
               65              70              75              80

           His Val Gln Pro Ala Gly Gln Pro Arg Gly Ser Leu Ser Ser Arg Ala
                            85              90              95

           Lys Asp Ser Arg Xaa Pro Phe Ser Leu Leu Ala Phe Leu Leu Cys Pro
                        100             105             110

           Ala Val Ala Ala Gly Xaa Ser Ser Cys Ser Arg Arg Glu Thr Val Leu
                        115             120             125

           Pro Leu Ser Pro Ser Leu Pro His Pro Ser Ser Cys Pro Gly Asn Leu
                    130             135             140

           Glu Pro Leu Gly Ala Glu Leu Asp Gly Gly Pro Ala Ala Ser Met Cys
           145             150             155             160

           Thr Lys Arg Ser Pro Phe Gln Gly Lys Arg Thr Gly Trp Arg Met Glu
                            165             170             175

           Gly Lys Pro Pro Arg Leu Arg Glu Leu Gln Glu Gly Thr Leu Pro Gly
                        180             185             190
```

<210> 1470
<211> 260
<212> PRT
<213> Homo sapiens

<400> 1470
```
           Arg Lys Cys Leu Tyr Leu Val Ala Gly Lys Trp Glu Glu Arg Lys Val
           1                5                    10                   15

           Val Met Ala Ala Ile Ala Ala Ser Glu Val Leu Val Asp Ser Ala Glu
                        20              25              30
```

```
Glu Gly Ser Leu Ala Ala Ala Ala Glu Leu Ala Ala Gln Lys Arg Glu
            35              40                  45

Gln Arg Leu Arg Lys Phe Arg Glu Leu His Leu Met Arg Asn Glu Ala
        50              55                  60

Arg Lys Leu Asn His Gln Glu Val Val Glu Glu Asp Lys Arg Leu Lys
    65              70                  75                  80

Leu Pro Ala Asn Trp Glu Ala Lys Lys Ala Arg Leu Glu Trp Glu Leu
                85                  90                  95

Lys Glu Glu Glu Lys Lys Lys Glu Cys Ala Ala Arg Gly Glu Asp Tyr
            100                 105                 110

Glu Lys Val Lys Leu Leu Glu Ile Ser Ala Glu Asp Ala Glu Arg Trp
        115                 120                 125

Glu Arg Lys Lys Lys Arg Lys Asn Pro Asp Leu Gly Phe Ser Asp Tyr
        130                 135                 140

Ala Ala Ala Gln Leu Arg Gln Tyr His Arg Leu Thr Lys Gln Ile Lys
145                 150                 155                 160

Pro Asp Met Glu Thr Tyr Glu Arg Leu Arg Glu Lys His Gly Glu Glu
                165                 170                 175

Phe Phe Pro Thr Ser Asn Ser Leu Leu His Gly Thr His Val Pro Ser
                180                 185                 190

Thr Glu Glu Ile Asp Arg Met Val Ile Asp Leu Glu Lys Gln Ile Glu
        195                 200                 205

Lys Arg Asp Lys Tyr Ser Arg Arg Arg Pro Tyr Asn Asp Asp Ala Asp
        210                 215                 220

Ile Asp Tyr Ile Asn Glu Arg Asn Ala Lys Phe Asn Lys Lys Ala Glu
225                 230                 235                 240

Arg Phe Tyr Gly Lys Tyr Thr Ala Glu Ile Lys Gln Asn Leu Glu Arg
                245                 250                 255

Gly Thr Ala Val
            260
```

<210> 1471
<211> 121
<212> PRT

<213> Homo sapiens

<400> 1471
```
Leu Val Lys Gly Met Thr Val Leu Glu Ala Val Leu Glu Ile Gln Ala
 1               5                   10                  15

Ile Thr Gly Ser Arg Leu Leu Ser Met Val Pro Gly Pro Ala Arg Pro
                20                  25                  30

Pro Gly Ser Cys Trp Asp Pro Thr Gln Cys Thr Arg Thr Trp Leu Leu
                35                  40                  45

Ser His Thr Pro Arg Arg Arg Trp Ile Ser Gly Leu Pro Arg Ala Ser
            50                  55                  60

Cys Arg Leu Gly Glu Glu Pro Pro Pro Leu Pro Tyr Cys Asp Gln Ala
 65                 70                  75                  80

Tyr Gly Glu Glu Leu Ser Ile Arg His Arg Glu Thr Trp Ala Trp Leu
                85                  90                  95

Ser Arg Thr Asp Thr Ala Trp Pro Gly Ala Pro Gly Val Lys Gln Ala
                100                 105                 110

Arg Ile Leu Gly Glu Leu Leu Leu Val
            115                 120
```

<210> 1472
<211> 298
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (89)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1472
```
Pro Cys Ala Trp Arg Ala Ala Arg Gly Gly Pro Cys Ala Ala Pro Leu
```

```
        1                    5                         10                          15

      Gly   Leu   Arg   Glu   Arg   Gly   Arg   Val   Ser   Xaa   Arg   Leu   Leu   Gly   Pro   Ala
                        20                      25                      30

      Ala   Ala   Arg   Ala   Leu   Leu   Leu   Gly   Leu   Pro   Gly   Arg   Thr   Leu   Glu   Ala
                  35                      40                      45

      Ala   Ser   Gly   Arg   Ser   Trp   Leu   Ala   Ala   Ala   Arg   Asp   Arg   Pro   Ala   Glu
            50                      55                      60

      Pro   Leu   Phe   Gly   Arg   Gly   Glu   Gly   Gly   Ser   Gln   Ala   Ser   Gly   Xaa   Ala
      65                      70                      75                            80

      Gly   Ala   Ala   Ala   Glu   Ala   Pro   Gly   Xaa   Gln   Trp   Gly   Pro   Ala   Ser   Thr
                              85                      90                      95

      Pro   Ser   Leu   Tyr   Glu   Asn   Pro   Trp   Thr   Ile   Pro   Asn   Met   Leu   Ser   Met
                        100                     105                     110

      Thr   Arg   Ile   Gly   Leu   Ala   Pro   Val   Leu   Gly   Tyr   Leu   Ile   Ile   Glu   Glu
                  115                     120                     125

      Asp   Phe   Asn   Ile   Ala   Leu   Gly   Val   Phe   Ala   Leu   Ala   Gly   Leu   Thr   Asp
            130                     135                     140

      Leu   Leu   Asp   Gly   Phe   Ile   Ala   Arg   Asn   Trp   Ala   Asn   Gln   Arg   Ser   Ala
      145                     150                     155                     160

      Leu   Gly   Ser   Ala   Leu   Asp   Pro   Leu   Ala   Asp   Lys   Ile   Leu   Ile   Ser   Ile
                        165                     170                     175

      Leu   Tyr   Val   Ser   Leu   Thr   Tyr   Ala   Asp   Leu   Ile   Pro   Val   Pro   Leu   Thr
                  180                     185                     190

      Tyr   Met   Ile   Ile   Ser   Arg   Asp   Val   Met   Leu   Ile   Ala   Ala   Val   Phe   Tyr
                  195                     200                     205

      Val   Arg   Tyr   Arg   Thr   Leu   Pro   Thr   Pro   Arg   Thr   Leu   Ala   Lys   Tyr   Phe
            210                     215                     220

      Asn   Pro   Cys   Tyr   Ala   Thr   Ala   Arg   Leu   Lys   Pro   Thr   Phe   Ile   Ser   Lys
      225                     230                     235                     240

      Val   Asn   Thr   Ala   Val   Gln   Leu   Ile   Leu   Val   Ala   Ala   Ser   Leu   Ala   Ala
                        245                     250                     255

      Pro   Val   Phe   Asn   Tyr   Ala   Asp   Ser   Ile   Tyr   Leu   Gln   Ile   Leu   Trp   Cys
                        260                     265                     270

      Phe   Thr   Ala   Phe   Thr   Thr   Ala   Ala   Ser   Ala   Tyr   Ser   Tyr   Tyr   His   Tyr
```

```
                275                   280                        285

Gly Arg Lys Thr Val Gln Val Ile Lys Asp
   290                   295




<210> 1473
<211> 526
<212> PRT
<213> Homo sapiens

<400> 1473
Val Ala Leu Gly Ala Ala Met Ser Ala Gly Glu Val Glu Arg Leu Val
  1               5                  10                     15

Ser Glu Leu Ser Gly Gly Thr Gly Gly Asp Glu Glu Glu Glu Trp Leu
             20                  25                  30

Tyr Gly Asp Glu Asn Glu Val Glu Arg Pro Glu Glu Glu Asn Ala Ser
             35                  40                  45

Ala Asn Pro Pro Ser Gly Ile Glu Asp Glu Thr Ala Glu Asn Gly Val
         50                  55                  60

Pro Lys Pro Lys Val Thr Glu Thr Glu Asp Asp Ser Asp Ser Asp Ser
 65                  70                  75                     80

Asp Asp Asp Glu Asp Asp Val His Val Thr Ile Gly Asp Ile Lys Thr
                 85                  90                  95

Gly Ala Pro Gln Tyr Gly Ser Tyr Gly Thr Ala Pro Val Asn Leu Asn
             100                 105                 110

Ile Lys Thr Gly Gly Arg Val Tyr Gly Thr Thr Gly Thr Lys Val Lys
             115                 120                 125

Gly Val Asp Leu Asp Ala Pro Gly Ser Ile Asn Gly Val Pro Leu Leu
         130                 135                 140

Glu Val Asp Leu Asp Ser Phe Glu Asp Lys Pro Trp Arg Lys Pro Gly
145                 150                 155                 160

Ala Asp Leu Ser Asp Tyr Phe Asn Tyr Gly Phe Asn Glu Asp Thr Trp
             165                 170                 175

Lys Ala Tyr Cys Glu Lys Gln Lys Arg Ile Arg Met Gly Leu Glu Val
             180                 185                 190

Ile Pro Val Thr Ser Thr Thr Asn Lys Ile Thr Val Gln Gln Gly Arg
             195                 200                 205
```

```
Thr Gly Asn Ser Glu Lys Glu Thr Ala Leu Pro Ser Thr Lys Ala Glu
    210             215             220

Phe Thr Ser Pro Pro Ser Leu Phe Lys Thr Gly Leu Pro Pro Ser Arg
225             230             235             240

Arg Leu Pro Gly Ala Ile Asp Val Ile Gly Gln Thr Ile Thr Ile Ser
            245             250             255

Arg Val Glu Gly Arg Arg Arg Ala Asn Glu Asn Ser Asn Ile Gln Val
            260             265             270

Leu Ser Glu Arg Ser Ala Thr Glu Val Asp Asn Asn Phe Ser Lys Pro
        275             280             285

Pro Pro Phe Phe Pro Pro Gly Ala Pro Pro Thr His Leu Pro Pro Pro
    290             295             300

Pro Phe Leu Pro Pro Pro Pro Thr Val Ser Thr Ala Pro Pro Leu Ile
305             310             315             320

Pro Pro Pro Gly Phe Pro Pro Pro Pro Gly Ala Pro Pro Pro Ser Leu
            325             330             335

Ile Pro Thr Ile Glu Ser Gly His Ser Ser Gly Tyr Asp Ser Arg Ser
            340             345             350

Ala Arg Ala Phe Pro Tyr Gly Asn Val Ala Phe Pro His Leu Pro Gly
        355             360             365

Ser Ala Pro Ser Trp Pro Ser Leu Val Asp Thr Ser Lys Gln Trp Asp
    370             375             380

Tyr Tyr Ala Arg Arg Glu Lys Asp Arg Asp Arg Glu Arg Asp Arg Asp
385             390             395             400

Arg Glu Arg Asp Arg Asp Arg Asp Arg Glu Arg Glu Arg Thr Arg Glu
            405             410             415

Arg Glu Arg Glu Arg Asp His Ser Pro Thr Pro Ser Val Phe Asn Ser
        420             425             430

Asp Glu Glu Arg Tyr Arg Tyr Arg Glu Tyr Ala Glu Arg Gly Tyr Glu
        435             440             445

Arg His Arg Ala Ser Arg Glu Lys Glu Glu Arg His Arg Glu Arg Arg
    450             455             460

His Arg Glu Lys Glu Glu Thr Arg His Lys Ser Ser Arg Ser Asn Ser
465             470             475             480
```

Arg Arg Arg His Glu Ser Glu Glu Gly Asp Ser His Arg Arg His Lys
                485   490   495

His Lys Lys Ser Lys Arg Ser Lys Glu Gly Lys Glu Ala Gly Ser Glu
                500   505   510

Pro Ala Pro Glu Gln Glu Ser Thr Glu Ala Thr Pro Ala Glu
                515   520   525

<210> 1474
<211> 70
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1474
Ile Met Val Arg Pro Gly Xaa Thr Leu Arg Leu Asp Lys Lys Met Leu
 1   5   10   15

Leu Lys Arg Ser Ser Phe Lys Arg Ser Cys Ser Cys Val Lys Lys Leu
                20   25   30

Gln Val Trp Phe Val Leu Val Cys Asp His Glu Cys Thr Met Lys Lys
                35   40   45

Thr Leu Asp Ala Ala Phe Phe Ser Ser Glu Asp Ser Leu Gly Ile Pro
        50   55   60

Glu Asp Ser Ser Leu Arg
 65   70

<210> 1475
<211> 345
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE
<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (129)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (159)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (166)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1475
Lys Lys Val Val Ser Tyr Phe Phe Arg Trp Gln Ser Leu Leu Ile Met
 1   5   10   15

Ile Met Met Phe Lys Ile Pro Pro Ser Asp Gly Leu Leu Ile Leu Pro
            20   25   30

Cys Tyr Gly Ser Met Thr Thr Asp Gln Gln Arg Xaa Ile Phe Leu Pro
        35   40   45

Pro Pro Pro Gly Ile Xaa Lys Cys Val Ile Ser Thr Asn Ile Ser Ala
    50   55   60

Thr Ser Leu Thr Ile Asp Gly Ile Arg Tyr Val Val Asp Gly Gly Phe
65   70   75   80

Val Lys Gln Leu Asn His Asn Pro Arg Leu Gly Leu Asp Ile Leu Glu
            85   90   95

Val Val Pro Ile Ser Lys Ser Glu Ala Leu Gln Arg Ser Gly Arg Ala
            100   105   110

Gly Arg Thr Ser Ser Gly Lys Cys Phe Arg Ile Tyr Ser Lys Asp Phe
        115   120   125

Xaa Asn Gln Cys Met Pro Asp His Val Ile Pro Glu Ile Lys Arg Thr
    130   135   140

Ser Leu Thr Ser Val Val Leu Thr Leu Lys Cys Leu Ala Ile Xaa Asp
145   150   155   160

Val Ile Arg Phe Pro Xaa Leu Asp Pro Pro Asn Glu Arg Leu Ile Leu

```
                        165                    170                    175
    Glu Ala Leu Lys Gln Leu Tyr Gln Cys Asp Ala Ile Asp Arg Ser Gly
                180                    185                    190

    His Val Thr Arg Leu Gly Leu Ser Met Val Glu Phe Pro Leu Pro Pro
                195                    200                    205

    His Leu Thr Cys Ala Val Ile Lys Ala Ala Ser Leu Asp Cys Glu Asp
            210                    215                    220

    Leu Leu Leu Pro Ile Ala Ala Met Leu Ser Val Glu Asn Val Phe Ile
    225                    230                    235                    240

    Arg Pro Val Asp Pro Glu Tyr Gln Lys Glu Ala Glu Gln Arg His Arg
                    245                    250                    255

    Glu Leu Ala Ala Lys Ala Gly Gly Phe Asn Asp Phe Ala Thr Leu Ala
                260                    265                    270

    Val Ile Phe Glu Gln Cys Lys Ser Ser Gly Ala Pro Ala Ser Trp Cys
                275                    280                    285

    Gln Lys His Trp Ile His Trp Arg Cys Leu Phe Ser Ala Phe Arg Val
                290                    295                    300

    Glu Ala Gln Leu Arg Glu Leu Ile Arg Lys Leu Lys Gln Gln Ser Asp
    305                    310                    315                    320

    Ser Gln Lys Arg Pro Leu Lys Ala Leu Asn Met Lys Tyr Tyr Glu Asp
                    325                    330                    335

    Val Phe Val Arg Ala Ile Ser Lys Met
                340                    345


    <210> 1476
    <211> 195
    <212> PRT
    <213> Homo sapiens

    <400> 1476
    Tyr Leu Leu Phe Val Lys Asn Met Ser Ser Leu Glu Ile Ser Ser Ser
      1                  5                   10                   15

    Cys Phe Ser Leu Glu Thr Lys Leu Pro Leu Ser Pro Pro Leu Val Glu
                20                    25                    30

    Asp Ser Ala Phe Glu Pro Ser Arg Lys Asp Met Asp Glu Val Glu Glu
                35                    40                    45
```

```
Lys Ser Lys Asp Val Ile Asn Phe Thr Ala Glu Lys Leu Ser Val Asp
    50                  55                  60

Glu Val Ser Gln Leu Val Ile Ser Pro Leu Cys Gly Ala Ile Ser Leu
65              70              75                  80

Phe Val Gly Thr Thr Arg Asn Asn Phe Glu Gly Lys Lys Val Ile Ser
            85                  90                  95

Leu Glu Tyr Glu Ala Tyr Leu Pro Met Ala Glu Asn Glu Val Arg Lys
            100             105             110

Ile Cys Ser Asp Ile Arg Gln Lys Trp Pro Val Lys His Ile Ala Val
        115             120             125

Phe His Arg Leu Gly Leu Val Pro Val Ser Glu Ala Ser Ile Ile Ile
    130             135             140

Ala Val Ser Ser Ala His Arg Ala Ala Ser Leu Glu Ala Val Ser Tyr
145             150             155             160

Ala Ile Asp Thr Leu Lys Ala Lys Val Pro Ile Trp Lys Lys Glu Ile
            165             170             175

Tyr Glu Glu Ser Ser Thr Trp Lys Gly Asn Lys Glu Cys Phe Trp Ala
            180             185             190

Ser Asn Ser
        195
```

```
<210> 1477
<211> 387
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (370)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (374)
```

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (378)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (379)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1477
```
Asp Ser Glu Asp Asn Pro Gln Thr Leu Leu Phe Ser Ala Thr Cys Pro
 1               5                   10                  15

Gln Trp Val Tyr Lys Val Ala Lys Lys Tyr Met Lys Ser Arg Tyr Glu
            20                  25                  30

Gln Val Xaa Leu Val Gly Lys Met Thr Gln Lys Ala Ala Thr Thr Val
            35                  40                  45

Glu His Leu Ala Ile Gln Cys His Trp Ser Gln Arg Pro Ala Val Ile
        50                  55                  60

Gly Asp Val Leu Gln Val Tyr Ser Gly Ser Glu Gly Arg Ala Ile Ile
 65                  70                  75                  80

Phe Cys Glu Thr Lys Lys Asn Val Thr Glu Met Ala Met Asn Pro His
                85                  90                  95

Ile Lys Gln Asn Ala Gln Cys Leu His Gly Asp Ile Ala Gln Ser Gln
                100                 105                 110

Arg Glu Ile Thr Leu Lys Gly Phe Arg Glu Gly Ser Phe Lys Val Leu
            115                 120                 125

Val Ala Thr Asn Val Ala Ala Arg Gly Leu Asp Ile Pro Glu Val Asp
        130                 135                 140

Leu Val Ile Gln Ser Ser Pro Pro Gln Asp Val Glu Ser Tyr Ile His
145                 150                 155                 160

Arg Ser Gly Arg Thr Gly Arg Ala Gly Arg Thr Gly Ile Cys Ile Cys
                165                 170                 175

Phe Tyr Gln Pro Arg Glu Arg Gly Gln Leu Arg Tyr Val Glu Gln Lys
                180                 185                 190

Ala Gly Ile Thr Phe Lys Arg Val Gly Val Pro Ser Thr Met Asp Leu
                195                 200                 205
```

```
Val Lys Ser Lys Ser Met Asp Ala Ile Arg Ser Leu Ala Ser Val Ser
    210             215             220

Tyr Ala Ala Val Asp Phe Phe Arg Pro Ser Ala Gln Arg Leu Ile Glu
225             230             235             240

Glu Lys Gly Ala Val Asp Ala Leu Ala Ala Ala Leu Ala His Ile Ser
                245             250             255

Gly Ala Ser Ser Phe Glu Pro Arg Ser Leu Ile Thr Ser Asp Lys Gly
            260             265             270

Phe Val Thr Met Thr Leu Glu Ser Leu Glu Glu Ile Gln Asp Val Ser
        275             280             285

Cys Ala Trp Lys Glu Leu Asn Arg Lys Leu Ser Ser Asn Ala Val Ser
    290             295             300

Gln Ile Thr Arg Met Cys Leu Leu Lys Gly Asn Met Gly Val Cys Phe
305             310             315             320

Asp Val Pro Thr Thr Glu Ser Glu Arg Leu Gln Ala Glu Trp His Asp
            325             330             335

Ser Asp Trp Ile Leu Ser Val Pro Ala Lys Leu Pro Glu Ile Glu Glu
            340             345             350

Tyr Tyr Asp Gly Asn Thr Ser Ser Asn Ser Arg Gln Arg Ser Gly Trp
        355             360             365

Ser Xaa Gly Arg Ser Xaa Arg Ser Ala Xaa Xaa Gly Gly Arg Ser Gly
    370             375             380

Gly Gly Gln
385
```

```
<210> 1478
<211> 55
<212> PRT
<213> Homo sapiens

<400> 1478
Thr Gly Ala Cys His His Ala Gln Leu Asn Phe Val Phe Leu Val Glu
  1             5               10              15

Thr Gly Phe His His Val Gly Gln Asp Gly Leu Asn Leu Leu Thr Leu
            20              25              30
```

```
Arg Ser Ala His Leu Ser Leu Pro Lys Cys Trp Asp Tyr Arg Arg Asn
        35                  40                  45

Thr Arg Ala Trp Pro Val Leu
        50              55



<210> 1479
<211> 559
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (555)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1479
Ala Arg Ala Asp Gly Arg Asp Gly Arg Gly Gly Arg Arg Ala Pro Trp
 1               5                  10                  15

Arg Ala Leu Thr Ser Ala Ser Pro Arg Ala Ala Leu Pro Gln Ala Gln
            20                  25                  30

Cys Pro Glu Leu Gly Ala Ser Pro Ala Arg Gly Thr Leu Leu Ala Lys
        35                  40                  45

Glu Val Val Ser Pro Val Leu Ser Ser Arg Pro Gly Gly Pro Lys Leu
        50                  55                  60

Pro Asp Asp Glu Glu Pro Pro Asn Met Ala Ser Glu Ser Gly Lys Leu
 65                  70                  75                  80

Trp Gly Gly Arg Phe Val Gly Ala Val Asp Pro Ile Met Glu Lys Phe
                85                  90                  95

Asn Ala Ser Ile Ala Tyr Asp Arg His Leu Trp Glu Val Asp Val Gln
            100                 105                 110

Gly Ser Lys Ala Tyr Ser Arg Gly Leu Glu Lys Ala Gly Leu Leu Thr
            115                 120                 125

Lys Ala Glu Met Asp Gln Ile Leu His Gly Leu Asp Lys Val Ala Glu
        130                 135                 140

Glu Trp Ala Gln Gly Thr Phe Lys Leu Asn Ser Asn Asp Glu Asp Ile
145                 150                 155                 160

His Thr Ala Asn Glu Arg Arg Leu Lys Glu Leu Ile Gly Ala Thr Ala
                165                 170                 175
```

```
Gly Lys Leu His Thr Gly Arg Ser Arg Asn Asp Gln Val Val Thr Asp
            180             185             190

Leu Arg Leu Trp Met Arg Gln Thr Cys Ser Thr Leu Ser Gly Leu Leu
        195             200             205

Trp Glu Leu Ile Arg Thr Met Val Asp Arg Ala Glu Ala Glu Arg Asp
    210             215             220

Val Leu Phe Pro Gly Tyr Thr His Leu Gln Arg Ala Gln Pro Ile Arg
225             230             235             240

Trp Ser His Trp Ile Leu Ser His Ala Val Ala Leu Thr Arg Asp Ser
            245             250             255

Glu Arg Leu Leu Glu Val Arg Lys Arg Ile Asn Val Leu Pro Leu Gly
        260             265             270

Ser Gly Ala Ile Ala Gly Asn Pro Leu Gly Val Asp Arg Glu Leu Leu
        275             280             285

Arg Ala Glu Leu Asn Phe Gly Ala Ile Thr Leu Asn Ser Met Asp Ala
    290             295             300

Thr Ser Glu Arg Asp Phe Val Ala Glu Phe Leu Phe Trp Ala Ser Leu
305             310             315             320

Cys Met Thr His Leu Ser Arg Met Ala Glu Asp Leu Ile Leu Tyr Cys
            325             330             335

Thr Lys Glu Phe Ser Phe Val Gln Leu Ser Asp Ala Tyr Ser Thr Gly
        340             345             350

Ser Ser Leu Met Pro Gln Lys Lys Asn Pro Asp Ser Leu Glu Leu Ile
        355             360             365

Arg Ser Lys Ala Gly Arg Val Phe Gly Arg Cys Ala Gly Leu Leu Met
    370             375             380

Thr Leu Lys Gly Leu Pro Ser Thr Tyr Asn Lys Asp Leu Gln Glu Asp
385             390             395             400

Lys Glu Ala Val Phe Glu Val Ser Asp Thr Met Ser Ala Val Leu Gln
            405             410             415

Val Ala Thr Gly Val Ile Ser Thr Leu Gln Ile His Gln Glu Asn Met
            420             425             430

Gly Gln Ala Leu Ser Pro Asp Met Leu Ala Thr Asp Leu Ala Tyr Tyr
        435             440             445
```

```
Leu Val Arg Lys Gly Met Pro Phe Arg Gln Ala His Glu Ala Ser Gly
    450             455             460

Lys Ala Val Phe Met Ala Glu Thr Lys Gly Val Ala Leu Asn Gln Leu
465             470             475             480 .

Ser Leu Gln Glu Leu Gln Thr Ile Ser Pro Leu Phe Ser Gly Asp Val
            485             490             495

Ile Cys Val Trp Asp Tyr Gly His Ser Val Glu Gln Tyr Gly Ala Leu
            500             505             510

Gly Ala Leu Arg Ala Pro Ala Ser Thr Gly Arg Ser Ala Arg Cys Gly
        515             520             525

Arg Tyr Cys Arg His Ser Arg Pro Arg Ser Ser His Thr Cys Pro Leu
    530             535             540

Ile Lys Trp Ala Arg Glu Glu Lys Lys Lys Xaa Lys Lys Lys Phe
545             550             555
```

```
<210> 1480
<211> 200
<212> PRT
<213> Homo sapiens

<400> 1480
Ser Leu Gly Glu Leu Pro Thr Asp Pro Ser Ser Asp Glu Pro Val Phe
 1               5               10              15

His Ile Ser His Ile Asp Arg Val Tyr Thr Leu Arg Thr Asp Asn Ile
            20 .            25              30

Asn Glu Arg Thr Thr Trp Val Gln Lys Ile Lys Ala Ala Ser Glu Gln
        35              40              45

Tyr Ile Asp Thr Glu Lys Lys Lys Arg Glu Lys Ala Tyr Gln Ala Arg
    50              55              60

Ser Gln Lys Thr Ser Gly Ile Gly Arg Leu Met Val His Val Ile Glu
65              70              75              80

Ala Thr Glu Leu Lys Ala Cys Lys Pro Asn Gly Lys Ser Asn Pro Tyr
            85              90              95

Cys Glu Ile Ser Met Gly Ser Gln Ser Tyr Thr Thr Arg Thr Ile Gln
            100             105             110
```

```
Asp Thr Leu Asn Pro Lys Trp Asn Phe Asn Cys Gln Phe Phe Ile Lys
        115             120             125

Asp Leu Tyr Gln Asp Val Leu Cys Leu Thr Leu Phe Asp Arg Asp Gln
        130             135             140

Phe Ser Pro Asp Asp Phe Leu Gly Arg Thr Glu Ile Pro Val Ala Lys
145             150             155             160

Ile Arg Thr Glu Gln Glu Ser Lys Gly Pro Met Thr Arg Arg Leu Leu
                165             170             175

Leu His Glu Val Pro Thr Gly Glu Val Trp Val Arg Phe Asp Leu Gln
                180             185             190

Leu Phe Glu Gln Lys Thr Leu Leu
        195             200
```

```
<210> 1481
<211> 109
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1481
Gln Leu Leu Leu Leu Pro Pro Lys Ala Pro Arg Asn Pro Phe Leu Pro
 1               5               10              15

Cys Pro Gly Ser Arg Thr Pro Gly Tyr Ile Trp Lys Val Glu Met Trp
                20              25              30

Gly Ser Cys Xaa Leu Glu Tyr Tyr Val Ser Pro Pro Ser Ala Val Phe
                35              40              45

Ser Glu His Val Cys Cys Pro Trp Trp Glu Arg Gly His Cys Ala Val
        50              55              60

Val His Arg Cys Leu Ser Phe Thr Val Gly Leu Ser Val Cys Leu Ser
65              70              75              80

Phe Leu Ser Ala Ala Gln Met Glu Asn Asn Tyr Leu Leu His Trp Arg
                85              90              95

Glu Arg Lys Ser Leu Arg Ile Pro Lys Gly Thr Leu Ala
                100             105
```

```
<210> 1482
<211> 205
<212> PRT
<213> Homo sapiens

<400> 1482
Asp Pro Arg Val Arg Ala Ala Arg Thr Ala Phe Gly Ala Val Cys Arg
 1               5                  10                  15

Arg Leu Trp Gln Gly Leu Gly Asn Phe Ser Val Asn Thr Ser Lys Gly
              20                  25                  30

Asn Thr Ala Lys Asn Gly Gly Leu Leu Leu Ser Thr Asn Met Lys Trp
          35                  40                  45

Val Gln Phe Ser Asn Leu His Val Asp Val Pro Lys Asp Leu Thr Lys
      50                  55                  60

Pro Val Val Thr Ile Ser Asp Glu Pro Asp Ile Leu Tyr Lys Arg Leu
 65                  70                  75                  80

Ser Val Leu Val Lys Gly His Asp Lys Ala Val Leu Asp Ser Tyr Glu
              85                  90                  95

Tyr Phe Ala Val Leu Ala Ala Lys Glu Leu Gly Ile Ser Ile Lys Val
             100                 105                 110

His Glu Pro Pro Arg Lys Ile Glu Arg Phe Thr Leu Leu Gln Ser Val
             115                 120                 125

His Ile Tyr Lys Lys His Arg Val Gln Tyr Glu Met Arg Thr Leu Tyr
     130                 135                 140

Arg Cys Leu Glu Leu Glu His Leu Thr Gly Ser Thr Ala Asp Val Tyr
145                 150                 155                 160

Leu Glu Tyr Ile Gln Arg Asn Leu Pro Glu Gly Val Ala Met Glu Val
                 165                 170                 175

Thr Lys Thr Gln Leu Glu Gln Leu Pro Glu His Ile Lys Glu Pro Ile
             180                 185                 190

Trp Glu Thr Leu Ser Glu Glu Lys Glu Glu Ser Lys Ser
             195                 200                 205


<210> 1483
```

<211> 370
<212> PRT
<213> Homo sapiens

<400> 1483

```
Gly Gln Ile Lys Asp Glu Thr Leu Gln Ala Ala Val Arg Glu Ile Leu
 1               5                  10                  15

Ala Leu Ile Gly Tyr Val Asp Pro Val Lys Gly Arg Gly Ile Arg Ile
                20                  25                  30

Leu Ser Ile Asp Gly Gly Gly Thr Arg Gly Val Val Ala Leu Gln Thr
            35                  40                  45

Leu Arg Lys Leu Val Glu Leu Thr Gln Lys Pro Val His Gln Leu Phe
     50                  55                  60

Asp Tyr Ile Cys Gly Val Ser Thr Gly Ala Ile Leu Ala Phe Met Leu
 65                  70                  75                  80

Gly Leu Phe His Met Pro Leu Asp Glu Cys Glu Glu Leu Tyr Arg Lys
                85                  90                  95

Leu Gly Ser Asp Val Phe Ser Gln Asn Val Ile Val Gly Thr Val Lys
                100                 105                 110

Met Ser Trp Ser His Ala Phe Tyr Asp Ser Gln Thr Trp Glu Asn Ile
            115                 120                 125

Leu Lys Asp Arg Met Gly Ser Ala Leu Met Ile Glu Thr Ala Arg Asn
        130                 135                 140

Pro Thr Cys Pro Lys Val Ala Ala Val Ser Thr Ile Val Asn Arg Gly
145                 150                 155                 160

Ile Thr Pro Lys Ala Phe Val Phe Arg Asn Tyr Gly His Phe Pro Gly
                165                 170                 175

Ile Asn Ser His Tyr Leu Gly Gly Cys Gln Tyr Lys Met Trp Gln Ala
                180                 185                 190

Ile Arg Ala Ser Ser Ala Ala Pro Gly Tyr Phe Ala Glu Tyr Ala Leu
            195                 200                 205

Gly Asn Asp Leu His Gln Asp Gly Gly Leu Leu Leu Asn Asn Pro Ser
        210                 215                 220

Ala Leu Ala Met His Glu Cys Lys Cys Leu Trp Pro Asp Val Pro Leu
225                 230                 235                 240

Glu Cys Ile Val Ser Leu Gly Thr Gly Arg Tyr Glu Ser Asp Val Arg
```

```
                    245                     250                     255

Asn Thr Val Thr Tyr Thr Ser Leu Lys Thr Lys Leu Ser Asn Val Ile
            260                 265                 270

Asn Ser Ala Thr Asp Thr Glu Glu Val His Ile Met Leu Asp Gly Leu .
            275                 280                 285

Leu Pro Pro Asp Thr Tyr Phe Arg Phe Asn Pro Val Met Cys Glu Asn
            290                 295                 300

Ile Pro Leu Asp Glu Ser Arg Asn Glu Lys Leu Asp Gln Leu Gln Leu
305                 310                 315                 320

Glu Gly Leu Lys Tyr Ile Glu Arg Asn Glu Gln Lys Met Lys Lys Val
                325                 330                 335

Ala Lys Ile Leu Ser Gln Glu Lys Thr Thr Leu Gln Lys Ile Asn Asp
            340                 345                 350

Trp Ile Lys Leu Lys Thr Asp Met Tyr Glu Gly Leu Pro Phe Phe Ser
            355                 360                 365

Lys Leu
    370
```

```
<210> 1484
<211> 149
<212> PRT
<213> Homo sapiens

<400> 1484
Asp Ser Thr Gly Pro Glu Phe Pro Gly Arg Pro Thr Arg Pro Asn Ser
  1               5               10                  15

Val Leu Thr Ile Asn Ala Thr Met Pro Glu Pro Thr Lys Ser Ala Pro
            20                  25                  30

Ala Pro Lys Lys Gly Ser Lys Lys Ala Val Thr Lys Ala Gln Lys Lys
            35                  40                  45

Asp Gly Lys Lys Arg Lys Arg Ser Arg Lys Glu Ser Tyr Ser Val Tyr
        50                  55                  60

Val Tyr Lys Val Leu Lys Gln Val His Pro Asp Thr Gly Ile Ser Ser
65                  70                  75                  80

Lys Ala Met Gly Ile Met Asn Ser Phe Val Asn Asp Ile Phe Glu Arg
                85                  90                  95
```

```
Ile Ala Gly Glu Ala Ser Arg Leu Ala His Tyr Asn Lys Arg Ser Thr
            100             105             110

Ile Thr Ser Arg Glu Ile Gln Thr Ala Val Arg Leu Leu Leu Pro Gly
            115             120             125

Glu Leu Ala Lys His Ala Val Ser Glu Gly Thr Lys Ala Val Thr Lys
    130             135             140

Tyr Thr Ser Ser Lys
145


<210> 1485
<211> 142
<212> PRT
<213> Homo sapiens

<400> 1485
Asp Pro Arg Val Arg Thr Phe Pro Pro Thr Leu Leu Leu Leu His
    1           5               10              15

Ser Arg Leu Ser Leu Cys Leu Ser His Phe Leu Pro Ser Pro His Pro
            20              25              30

Pro Gln Cys Thr Glu Glu Gly Asn Arg Val Gln Thr His Ala Ala Pro
            35              40              45

Val Leu Arg Arg Glu Gly Lys Pro Arg Arg Glu Ala Ala Met Asn Val
    50              55              60

Asp His Glu Val Asn Leu Leu Val Glu Glu Ile His Arg Leu Gly Ser
65              70              75              80

Lys Asn Ala Asp Gly Lys Leu Ser Val Lys Phe Gly Val Leu Phe Arg
            85              90              95

Asp Asp Lys Cys Ala Asn Leu Phe Glu Ala Leu Val Gly Thr Leu Lys
            100             105             110

Ala Ala Lys Arg Arg Lys Ile Val Thr Tyr Pro Gly Glu Leu Leu Leu
            115             120             125

Gln Gly Val His Asp Asp Val Asp Ile Ile Leu Leu Gln Asp
    130             135             140


<210> 1486
```

```
<211> 298
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (183)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (195)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (223)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1486
Arg Gly Lys Cys Pro Ser Thr Ser Ser Leu Met Lys Glu Thr Ala Ala
 1               5                   10                  15

Pro Ser Gln Ile Met Lys Asn Phe Gln Ala Pro Pro Gln Ile Ser Leu
                20                  25                  30

Thr Ile Thr Leu Leu Leu Gly Glu Thr Thr Met Met Gln Pro Gln Pro
            35                  40                  45

Thr Gln Gln Xaa Thr Pro Gly Pro Ser Ser Gly Gly His Ala Ser Gln
        50                  55                  60

Ser Gly Asp Asn Ser Ser Glu Gln Gly Asp Gly Leu Asp Asn Ser Val
    65                  70                  75                  80

Ala Ser Pro Gly Thr Val Thr Asp Asp Asp Pro Asp Lys Asp Lys Lys
                85                  90                  95

Arg Gln Lys Lys Arg Gly Ile Phe Pro Lys Val Ala Thr Asn Ile Met
                100                 105                 110

Arg Ala Trp Leu Phe Gln His Leu Thr His Pro Tyr Pro Ser Glu Glu
                115                 120                 125

Gln Lys Lys Gln Leu Ala Gln Asp Thr Gly Leu Thr Ile Leu Gln Val
    130                 135                 140
```

```
Asn Asn Trp Phe Ile Asn Ala Arg Arg Arg Ile Val Gln Pro Met Ile
145                 150             155                 160

Asp Gln Ser Asn Arg Ala Gly Phe Leu Leu Asp Pro Ser Val Ser Gln
                165             170                 175

Gly Ala Ala Tyr Ser Pro Xaa Gly Gln Pro Met Gly Ser Phe Val Leu
                180             185                 190

Asp Gly Xaa Gln His Met Gly Ile Arg Pro Ala Gly Leu Gln Ser Met
            195                 200                 205

Pro Gly Asp Tyr Val Ser Gln Gly Gly Pro Met Gly Met Ser Xaa Ala
    210                 215                 220

Gln Pro Ser Tyr Thr Pro Pro Gln Met Thr Pro His Pro Thr Gln Leu
225                 230                 235                 240

Arg His Gly Pro Pro Met His Ser Tyr Leu Pro Ser His Pro His His
                245                 250                 255

Pro Ala Met Met Met His Gly Gly Pro Pro Thr His Pro Gly Met Thr
                260                 265                 270

Met Ser Ala Gln Ser Pro Thr Met Leu Asn Ser Val Asp Pro Asn Val
        275                 280                 285

Gly Gly Gln Val Met Asp Ile His Ala Gln
    290                 295
```

```
<210> 1487
<211> 133
<212> PRT
<213> Homo sapiens

<400> 1487
His Gln Ala Ile Lys Pro Gly Tyr Ser Ala Glu Asn Val Ala His Thr
 1               5               10                  15

Asp His Thr Leu Gly Cys Val Thr Ile Val Trp Cys Thr Cys Trp Lys
                20              25                  30

Asn Ser Ser Met Leu Leu Gly Asp Ile Ile Ser Val Gly Asn Met Pro
            35                  40                  45

Leu Thr Asp Phe Phe Phe Phe Leu Phe Ala Val Gly Leu Gly Gln Leu
    50                  55                  60
```

```
Ile Gln Gln Ser Ile Phe Phe Phe Phe Leu Ser Pro Asn Leu Asn Arg
65              70              75                  80

Ser Lys Met Cys Ser Gly Ile Pro Gly Asn Arg Cys Val Cys Lys Val
            85              90              95

Lys Asn Arg Leu Phe Arg Asn Ser Leu Phe Arg Tyr Leu His Pro Ala
        100             105             110

Ser His Val Lys Tyr Leu Ser Leu Lys Gly Leu Arg Cys Thr Ser Phe
        115             120             125

Ile Ser Tyr Phe Ser
    130
```

```
<210> 1488
<211> 42
<212> PRT
<213> Homo sapiens

<400> 1488
Gln Arg Cys Pro Arg Cys Gly His Glu Gly Met Ala Tyr His Thr Arg
 1           5               10                  15

Gln Met Arg Ser Ala Asp Glu Gly Gln Thr Val Phe Tyr Thr Cys Thr
            20              25              30

Asn Cys Lys Phe Gln Glu Lys Glu Asp Ser
        35              40
```

```
<210> 1489
<211> 136
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1489
His Glu Ala Ala Phe Val Leu Cys Leu Thr Met Pro Glu Pro Ala Lys
 1           5               10                  15

Ser Ala Pro Ala Pro Lys Lys Gly Ser Lys Lys Ala Val Thr Lys Ala
            20              25              30
```

Gln Lys Lys Asp Gly Lys Lys Arg Lys Arg Ser Arg Lys Glu Ser Tyr
        35   40   45

Ser Ile Tyr Val Tyr Lys Val Leu Lys Gln Val His Pro Asp Thr Gly
        50   55   60

Ile Ser Ser Lys Ala Met Gly Ile Met Asn Ser Phe Val Asn Asp Ile
65   70   75   80

Phe Glu Arg Ile Xaa Gly Glu Ala Ser Arg Leu Ala His Tyr Asn Lys
                85   90   95

Arg Ser Thr Ile Thr Ser Arg Glu Ile Gln Thr Ala Val Arg Leu Leu
            100   105   110

Leu Pro Gly Glu Leu Ala Lys His Ala Val Ser Glu Gly Thr Lys Ala
        115   120   125

Val Thr Lys Tyr Thr Ser Ser Lys
    130   135

<210> 1490
<211> 235
<212> PRT
<213> Homo sapiens

<400> 1490
Pro Leu Ser Pro Gly Ala Gln Leu Gly Arg Gly Ala Pro Thr Ser Ala
 1   5   10   15

Phe Pro Pro Pro Ala Ala Glu Ala His Pro Ala Ala Arg Arg Gly Leu
            20   25   30

Arg Ser Pro Gln Leu Pro Ser Gly Ala Met Ser Gln Asn Gly Ala Pro
        35   40   45

Gly Met Gln Glu Glu Ser Leu Gln Gly Ser Trp Val Glu Leu His Phe
        50   55   60

Ser Asn Asn Gly Asn Gly Gly Ser Val Pro Ala Ser Val Ser Ile Tyr
65   70   75   80

Asn Gly Asp Met Glu Lys Ile Leu Leu Asp Ala Gln His Glu Ser Gly
                85   90   95

Arg Ser Ser Ser Lys Ser Ser His Cys Asp Ser Pro Pro Arg Ser Gln
            100   105   110

Thr Pro Gln Asp Thr Asn Arg Ala Ser Glu Thr Asp Thr His Ser Ile

```
              115                    120                    125
Gly Glu Lys Asn Ser Ser Gln Ser Glu Glu Asp Asp Ile Glu Arg Arg
    130                    135                    140

Lys Glu Val Glu Ser Ile Leu Lys Lys Asn Ser Asp Trp Ile Trp Asp
145                    150                    155                    160

Trp Ser Ser Arg Pro Glu Asn Ile Pro Pro Lys Glu Phe Leu Phe Lys
                165                    170                    175

His Pro Lys Arg Thr Ala Thr Leu Ser Met Arg Asn Thr Ser Val Met
                180                    185                    190

Lys Lys Gly Gly Ile Phe Ser Ala Glu Phe Leu Lys Val Phe Leu Pro
                195                    200                    205

Ser Leu Leu Leu Ser His Leu Leu Ala Ile Gly Leu Gly Ile Tyr Ile
    210                    215                    220

Gly Arg Arg Leu Thr Thr Ser Thr Ser Thr Phe
225                    230                    235
```

```
<210> 1491
<211> 275
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (65)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1491
Lys Pro Glu Lys Lys Gly Val His Leu Asn Ser Asp Leu Pro Gln Met
    1                   5                  10                  15

Gln His Leu Trp Ile Pro Leu Cys Ala Pro Asn Ser Leu Ser Gln Leu
                20                  25                  30

Pro Ile Thr Asp Thr Ile Arg Lys Asp Ser Lys Glu Lys Lys Lys Arg
                35                  40                  45

Lys Ala Ser Lys Leu Thr Leu Trp Gly Thr Tyr His Gly Met Thr Leu
    50                  55                  60

Xaa Ser Val Thr Glu Gly Ala Ser Ala Arg Lys Thr Gln Thr Pro Ala
65                  70                  75                  80
```

```
Ala Gln Pro Val Pro Arg Pro Val Ser Gln Ala Arg Pro Pro Pro Asn
                85              90              95

Gln Lys Lys Gly Ser Arg Thr Pro Ile Ile Ile Ile Pro Ala Ala Thr
            100             105             110

Thr Ser Leu Ile Thr Met Leu Asn Ala Lys Asp Leu Leu Gln Asp Leu
            115             120             125

Lys Phe Val Pro Ser Asp Glu Lys Lys Lys Gln Gly Cys Gln Arg Glu
        130             135             140

Asn Glu Thr Leu Ile Gln Arg Arg Lys Asp Gln Met Gln Pro Gly Gly
145             150             155             160

Thr Ala Ile Ser Val Thr Val Pro Tyr Arg Val Val Asp Gln Pro Leu
            165             170             175

Lys Leu Met Pro Gln Asp Trp Asp Arg Val Val Ala Val Phe Val Gln
            180             185             190

Gly Pro Ala Trp Gln Phe Lys Gly Trp Pro Trp Leu Leu Pro Asp Gly
        195             200             205

Ser Pro Val Asp Ile Phe Ala Lys Ile Lys Ala Phe His Leu Lys Tyr
    210             215             220

Asp Glu Val Arg Leu Asp Pro Asn Val Gln Lys Trp Asp Val Thr Val
225             230             235             240

Leu Glu Leu Ser Tyr His Lys Arg His Leu Asp Arg Pro Val Phe Leu
            245             250             255

Arg Phe Trp Glu Thr Leu Asp Arg Tyr Met Val Lys His Lys Ser His
            260             265             270

Leu Arg Phe
        275
```

<210> 1492
<211> 380
<212> PRT
<213> Homo sapiens

<400> 1492
```
Gly Leu Arg Leu Gly Ser Trp Ser Gly Glu Glu Lys Gly Ile Pro Thr
  1           5               10              15

Cys Gly Thr Leu Gly Gly Pro Arg Gly Arg Arg Leu Pro Ile Asp Cys
```

```
                    20                      25                      30

        Gly Arg Cys Lys Gly Arg Ser Leu Trp Arg Leu Val Gly Val Leu Gly
                 35                      40                      45

        Ser Ala Gly Gly Gly Arg Gly Val Ser Glu Cys Glu Arg Gly Thr Gly
              50                      55                      60

        Ile Pro Asn Leu Arg Ala Ser Arg Leu Trp Arg Arg Gly Gly Arg Ala
         65                      70                      75                      80

        Gln Ala Ala Met Arg Asp Arg Thr His Glu Leu Arg Gln Gly Asp Asp
                          85                      90                      95

        Ser Ser Asp Glu Glu Asp Lys Glu Arg Val Ala Leu Val Val His Pro
                     100                     105                     110

        Gly Thr Ala Arg Leu Gly Ser Pro Asp Glu Glu Phe Phe His Lys Val
                     115                     120                     125

        Arg Thr Ile Arg Gln Thr Ile Val Lys Leu Gly Asn Lys Val Gln Glu
                 130                     135                     140

        Leu Glu Lys Gln Gln Val Thr Ile Leu Ala Thr Pro Leu Pro Glu Glu
        145                     150                     155                     160

        Ser Met Lys Gln Glu Leu Gln Asn Leu Arg Asp Glu Ile Lys Gln Leu
                         165                     170                     175

        Gly Arg Glu Ile Arg Leu Gln Leu Lys Ala Ile Glu Pro Gln Lys Glu
                     180                     185                     190

        Glu Ala Asp Glu Asn Tyr Asn Ser Val Asn Thr Arg Met Arg Lys Thr
                     195                     200                     205

        Gln His Gly Val Leu Ser Gln Gln Phe Val Glu Leu Ile Asn Lys Cys
             210                     215                     220

        Asn Ser Met Gln Ser Glu Tyr Arg Glu Lys Asn Val Glu Arg Ile Arg
        225                     230                     235                     240

        Arg Gln Leu Lys Ile Thr Asn Ala Gly Met Val Ser Asp Glu Glu Leu
                         245                     250                     255

        Glu Gln Met Leu Asp Ser Gly Gln Ser Glu Val Phe Val Ser Asn Ile
                     260                     265                     270

        Leu Lys Asp Thr Gln Val Thr Arg Gln Ala Leu Asn Glu Ile Ser Ala
                 275                     280                     285

        Arg His Ser Glu Ile Gln Gln Leu Glu Arg Ser Ile Arg Glu Leu His
```

```
            290                    295                    300

Asp Ile Phe Thr Phe Leu Ala Thr Glu Val Glu Met Gln Gly Glu Met
305                310                315                320

Ile Asn Arg Ile Glu Lys Asn Ile Leu Ser Ser Ala Asp Tyr Val Glu
              325                330                335

Arg Gly Gln Glu His Val Lys Thr Ala Leu Glu Asn Gln Lys Lys Ala
              340                345                350

Arg Lys Lys Lys Val Leu Ile Ala Ile Cys Val Ser Ile Thr Val Val
              355                360                365

Leu Leu Ala Val Ile Ile Gly Val Thr Val Val Gly
       370                375                380
```

```
<210> 1493
<211> 88
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (73)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1493
Ala Gln Lys Glu Leu Thr Lys Ala His Xaa Leu Glu Val Arg Leu His
  1             5                10                15

Thr Phe Ser Met Phe Gly Met Pro Arg Leu Pro Pro Xaa Asp Arg Arg
              20                25                30

His Trp Glu Ile Gly Glu Gly Gly Asp Ser Gly Leu Thr Ile Glu Lys
              35                40                45

Ser Trp Arg Glu Leu Val Pro Gly His Lys Glu Met Ser Gln Glu Leu
       50                55                60
```

```
Cys His Gln Gln Glu Ala Leu Trp Xaa Leu Leu Thr Thr Glu Leu Ile
 65              70          75              80

Leu Arg Glu Lys Ala Ser Arg Ser
                85
```

```
<210> 1494
<211> 469
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (299)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1494
Thr Ser Trp Met His Thr Arg Phe Ser Arg Arg Asn Trp Gly Lys Arg
 1           5               10              15

Thr Gly Thr Val Gln Val Leu Lys Arg Ser Gly Arg Glu Leu Ile Glu
            20              25              30

Asn Ser Arg Asp Asp Thr Thr Trp Val Lys Gly Gln Leu Gln Glu Leu
        35              40              45

Ser Thr Arg Trp Asp Thr Val Cys Lys Leu Ser Val Ser Lys Gln Ser
     50              55              60

Arg Leu Glu Gln Ala Leu Lys Gln Ala Glu Val Phe Arg Asp Thr Val
 65              70              75              80

His Met Leu Leu Glu Trp Leu Ser Glu Ala Glu Gln Thr Leu Arg Phe
            85              90              95

Arg Gly Ala Leu Pro Asp Asp Thr Glu Ala Leu Gln Ser Leu Ile Asp
            100             105             110

Thr His Lys Glu Phe Met Lys Lys Val Glu Glu Lys Arg Val Asp Val
            115             120             125

Asn Ser Ala Val Ala Met Gly Glu Val Ile Leu Ala Val Cys His Pro
        130             135             140

Asp Cys Ile Thr Thr Ile Lys His Trp Ile Thr Ile Ile Arg Ala Arg
145             150             155             160

Phe Glu Glu Val Leu Thr Trp Ala Lys Gln His Gln Gln Arg Leu Glu
```

```
              165                    170                    175

Thr Ala Leu Ser Glu Leu Val Ala Asn Ala Glu Leu Leu Glu Glu Leu
            180                185                190

Leu Ala Trp Ile Gln Trp Ala Glu Thr Thr Leu Ile Gln Arg Asp Gln
            195                200                205

Glu Pro Ile Pro Gln Asn Ile Asp Arg Val Lys Ala Leu Ile Ala Glu
            210                215                220

His Gln Thr Phe Met Glu Glu Met Thr Arg Lys Gln Pro Asp Val Asp
225                230                235                240

Arg Val Thr Lys Thr Tyr Lys Arg Lys Asn Ile Glu Pro Thr His Ala
            245                250                255

Pro Phe Ile Glu Lys Ser Arg Ser Gly Gly Arg Lys Ser Leu Ser Gln
            260                265                270

Pro Thr Pro Pro Pro Met Pro Ile Leu Ser Gln Ser Glu Ala Lys Asn
            275                280                285

Pro Arg Ile Asn Gln Leu Ser Ala Arg Trp Xaa Gln Val Trp Leu Leu
            290                295                300

Ala Leu Glu Arg Gln Arg Lys Leu Asn Asp Ala Leu Asp Arg Leu Glu
305                310                315                320

Glu Leu Lys Glu Phe Ala Asn Phe Asp Phe Asp Val Trp Arg Lys Lys
            325                330                335

Tyr Met Arg Trp Met Asn His Lys Lys Ser Arg Val Met Asp Phe Phe
            340                345                350

Arg Arg Ile Asp Lys Asp Gln Asp Gly Lys Ile Thr Arg Gln Glu Phe
            355                360                365

Ile Asp Gly Ile Leu Ala Ser Lys Phe Pro Thr Thr Lys Leu Glu Met
    370                375                380

Thr Ala Val Ala Asp Ile Phe Asp Arg Asp Gly Asp Gly Tyr Ile Asp
385                390                395                400

Tyr Tyr Glu Phe Val Ala Ala Leu His Pro Asn Lys Asp Ala Tyr Arg
            405                410                415

Pro Thr Thr Asp Ala Asp Lys Ile Glu Asp Glu Val Thr Arg Gln Val
            420                425                430

Ala Gln Cys Lys Cys Ala Lys Arg Phe Gln Val Glu Gln Ile Gly Glu
```

```
            435                440                445

Asn Lys Tyr Arg Val Arg Lys Arg Lys Ser Ser Pro Leu Leu Trp Trp
    450                455                460

Phe Leu Ile Cys Gly
465


<210> 1495
<211> 366
<212> PRT
<213> Homo sapiens

<400> 1495
Thr Asn Tyr Ile Ser Arg Gln Ala Ala Glu Gly Gly Arg Val Glu Gly
  1               5                10                15

Pro Pro Leu Arg Pro Pro Ala Thr Ser Arg Arg Trp Ala Gly Pro Thr
              20                25                30

Leu Trp Arg Met Glu Val Thr Gly Asp Ala Gly Val Pro Glu Ser Gly
          35                40                45

Glu Ile Arg Thr Leu Lys Pro Cys Leu Leu Arg Arg Asn Tyr Ser Arg
      50                55                60

Glu Gln His Gly Val Ala Ala Ser Cys Leu Glu Asp Leu Arg Ser Lys
  65                70                75                80

Ala Cys Asp Ile Leu Ala Ile Asp Lys Ser Leu Thr Pro Val Thr Leu
              85                90                95

Val Leu Ala Glu Asp Gly Thr Ile Val Asp Asp Asp Tyr Phe Leu
              100               105               110

Cys Leu Pro Ser Asn Thr Lys Phe Val Ala Leu Ala Ser Asn Glu Lys
          115               120               125

Trp Ala Tyr Asn Asn Ser Asp Gly Gly Thr Ala Trp Ile Ser Gln Glu
    130               135               140

Ser Phe Asp Val Asp Glu Thr Asp Ser Gly Ala Gly Leu Lys Trp Lys
145               150               155               160

Asn Val Ala Arg Gln Leu Lys Glu Asp Leu Ser Ser Ile Ile Leu Leu
              165               170               175

Ser Glu Glu Asp Leu Gln Met Leu Val Asp Ala Pro Cys Ser Asp Leu
              180               185               190
```

Ala Gln Glu Leu Arg Gln Ser Cys Ala Thr Val Gln Arg Leu Gln His
        195   200   205

Thr Leu Gln Gln Val Leu Asp Gln Arg Glu Glu Val Arg Gln Ser Lys
    210   215   220

Gln Leu Leu Gln Leu Tyr Leu Gln Ala Leu Glu Lys Glu Gly Ser Leu
225   230   235   240

Leu Ser Lys Gln Glu Glu Ser Lys Ala Ala Phe Gly Glu Glu Val Asp
                245   250   255

Ala Val Asp Thr Gly Ile Ser Arg Glu Thr Ser Ser Asp Val Ala Leu
            260   265   270

Ala Ser His Ile Leu Thr Ala Leu Arg Glu Lys Gln Ala Pro Glu Leu
        275   280   285

Ser Leu Ser Ser Gln Asp Leu Glu Leu Val Thr Lys Glu Asp Pro Lys
    290   295   300

Ala Leu Ala Val Ala Leu Asn Trp Asp Ile Lys Lys Thr Glu Thr Val
305   310   315   320

Gln Glu Ala Cys Glu Arg Glu Leu Ala Leu Arg Leu Gln Gln Thr Gln
            325   330   335

Ser Leu His Ser Leu Arg Ser Ile Ser Ala Ser Lys Ala Ser Pro Pro
            340   345   350

Gly Asp Leu Gln Asn Pro Lys Arg Ala Arg Gln Asp Pro Thr
        355   360   365

<210> 1496
<211> 578
<212> PRT
<213> Homo sapiens

<400> 1496
Phe Pro Phe Glu Leu Val Thr Asn Pro Asp Phe Ser Pro Thr Pro Val
    1   5   10   15

Thr Phe Glu Lys Ala Leu Asn Ala Gly Phe Ile Gln Ala Thr Asp Tyr
            20   25   30

Val Glu Ile Trp Gln Ala Tyr Leu Asp Tyr Leu Arg Arg Arg Val Asp
        35   40   45

Phe Lys Gln Asp Ser Ser Lys Glu Leu Glu Glu Leu Arg Ala Ala Phe
    50   55   60

Thr Arg Ala Leu Glu Tyr Leu Lys Gln Glu Val Glu Glu Arg Phe Asn
65   70   75   80

Glu Ser Gly Asp Pro Ser Cys Val Ile Met Gln Asn Trp Ala Arg Ile
            85   90   95

Glu Ala Arg Leu Cys Asn Asn Met Gln Lys Ala Arg Glu Leu Trp Asp
        100   105   110

Ser Ile Met Thr Arg Gly Asn Ala Lys Tyr Ala Asn Met Trp Leu Glu
        115   120   125

Tyr Tyr Asn Leu Glu Arg Ala His Gly Asp Thr Gln His Cys Arg Lys
    130   135   140

Ala Leu His Arg Ala Val Gln Cys Thr Ser Asp Tyr Pro Glu His Val
145   150   155   160

Cys Glu Val Leu Leu Thr Met Glu Arg Thr Glu Gly Ser Leu Glu Asp
            165   170   175

Trp Asp Ile Ala Val Gln Lys Thr Glu Thr Arg Leu Ala Arg Val Asn
        180   185   190

Glu Gln Arg Met Lys Ala Ala Glu Lys Glu Ala Ala Leu Val Gln Gln
        195   200   205

Glu Glu Glu Lys Ala Glu Gln Arg Lys Arg Ala Arg Ala Glu Lys Lys
    210   215   220

Ala Leu Lys Lys Lys Lys Lys Ile Arg Gly Pro Glu Lys Arg Gly Ala
225   230   235   240

Asp Glu Asp Asp Glu Lys Glu Trp Gly Asp Asp Glu Glu Glu Gln Pro
            245   250   255

Ser Lys Arg Arg Arg Val Glu Asn Ser Ile Pro Ala Ala Gly Glu Thr
        260   265   270

Gln Asn Val Glu Val Ala Ala Gly Pro Ala Gly Lys Cys Ala Ala Val
        275   280   285

Asp Val Glu Pro Pro Ser Lys Gln Lys Glu Lys Ala Ala Ser Leu Lys
    290   295   300

Arg Asp Met Pro Lys Val Leu His Asp Ser Ser Lys Asp Ser Ile Thr
305   310   315   320

```
Val Phe Val Ser Asn Leu Pro Tyr Ser Met Gln Glu Pro Asp Thr Lys
            325                 330             335

Leu Arg Pro Leu Phe Glu Ala Cys Gly Glu Val Val Gln Ile Arg Pro
            340                 345             350

Ile Phe Ser Asn Arg Gly Asp Phe Arg Gly Tyr Cys Tyr Val Glu Phe
            355                 360             365

Lys Glu Glu Lys Ser Ala Leu Gln Ala Leu Glu Met Asp Arg Lys Ser
    370             375                 380

Val Glu Gly Arg Pro Met Phe Val Ser Pro Cys Val Asp Lys Ser Lys
385             390                 395             400

Asn Pro Asp Phe Lys Val Phe Arg Tyr Ser Thr Ser Leu Glu Lys His
            405                 410             415

Lys Leu Phe Ile Ser Gly Leu Pro Phe Ser Cys Thr Lys Glu Glu Leu
            420                 425             430

Glu Glu Ile Cys Lys Ala His Gly Thr Val Lys Asp Leu Arg Leu Val
        435                 440             445

Thr Asn Arg Ala Gly Lys Pro Lys Gly Leu Ala Tyr Val Glu Tyr Glu
    450             455                 460

Asn Glu Ser Gln Ala Ser Gln Ala Val Met Lys Met Asp Gly Met Thr
465             470                 475             480

Ile Lys Glu Asn Ile Ile Lys Val Ala Ile Ser Asn Pro Pro Gln Arg
            485                 490             495

Lys Val Pro Glu Lys Pro Glu Thr Arg Lys Ala Pro Gly Gly Pro Met
            500                 505             510

Leu Leu Pro Gln Thr Tyr Gly Ala Arg Gly Lys Gly Arg Thr Gln Leu
            515                 520             525

Ser Leu Leu Pro Arg Ala Leu Gln Arg Pro Ser Ala Ala Ala Pro Gln
    530             535                 540

Ala Glu Asn Gly Pro Ala Ala Ala Pro Ala Val Ala Ala Pro Ala Ala
545             550                 555             560

Thr Glu Ala Pro Lys Met Ser Asn Ala Asp Phe Ala Lys Leu Phe Leu
            565                 570             575

Arg Lys
```

```
<210> 1497
<211> 316
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (214)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1497
Pro Trp Ser Ala Ala Ala Gly Leu Arg Ala Gly Val Arg Val Pro Arg
 1               5                  10                  15

Ser Pro Gly Pro Ser Arg Arg Met Pro Ala Arg Ser Gly Ala Gln Phe
                20                  25                  30

Cys Arg Arg Met Gly Gln Lys Lys Gln Arg Pro Ala Arg Ala Gly Gln
            35                  40                  45

Pro His Ser Ser Ser Asp Ala Ala Gln Ala Pro Ala Glu Xaa Pro His
        50                  55                  60

Ser Ser Ser Asp Ala Ala Gln Ala Pro Cys Pro Arg Glu Arg Cys Leu
65                  70                  75                  80

Gly Pro Pro Thr Thr Pro Gly Pro Tyr Arg Ser Ile Tyr Phe Ser Ser
                85                  90                  95

Pro Lys Gly His Leu Thr Arg Leu Gly Leu Glu Phe Phe Asp Gln Pro
            100                 105                 110

Ala Val Pro Leu Ala Arg Ala Phe Leu Gly Gln Val Leu Val Arg Arg
            115                 120                 125

Leu Pro Asn Gly Thr Glu Leu Arg Gly Arg Ile Val Glu Thr Glu Ala
    130                 135                 140

Tyr Leu Gly Pro Glu Asp Glu Ala Ala His Ser Arg Gly Gly Arg Gln
145                 150                 155                 160

Thr Pro Arg Asn Arg Gly Met Phe Met Lys Pro Gly Thr Leu Tyr Val
                165                 170                 175
```

```
Tyr Ile Ile Tyr Gly Met Tyr Phe Cys Met Asn Ile Ser Ser Gln Gly
            180             185             190

Asp Gly Ala Cys Val Leu Leu Arg Ala Leu Glu Pro Leu Glu Gly Leu
        195             200             205

Glu Thr Met Arg Gln Xaa Arg Ser Thr Leu Arg Lys Gly Thr Ala Ser
        210             215             220

Arg Val Leu Lys Asp Arg Glu Leu Cys Ser Gly Pro Ser Lys Leu Cys
225             230             235             240

Gln Ala Leu Ala Ile Asn Lys Ser Phe Asp Gln Arg Asp Leu Ala Gln
                245             250             255

Asp Glu Ala Val Trp Leu Glu Arg Gly Pro Leu Glu Pro Ser Glu Pro
            260             265             270

Ala Val Val Ala Ala Ala Arg Val Gly Val Gly His Ala Gly Glu Trp
            275             280             285

Ala Arg Lys Pro Leu Arg Phe Tyr Val Arg Gly Ser Pro Trp Val Ser
        290             295             300

Val Val Asp Arg Val Ala Glu Gln Asp Thr Gln Ala
305             310             315
```

<210> 1498
<211> 82
<212> PRT
<213> Homo sapiens

<400> 1498

```
Lys Cys Asn Tyr Val Leu Ser Ala Ser Lys Phe Lys Thr Tyr Trp Asn
  1             5              10              15

Val Glu Ser Val Val Thr Lys Tyr Val Arg Arg Thr Lys Gly Met Cys
            20              25              30

Lys Ser Leu Met Pro Ile Ser Ser Glu Asn Leu Ser Lys Leu Thr Gly
        35              40              45

Pro Ala Glu Thr Ala His Ser Ala Arg Arg Asn His Asp Ile Ala Leu
    50              55              60

Pro Cys Gly Arg Ser Thr Cys Leu Glu Asn Thr Val Leu Tyr Tyr His
 65              70              75              80

Tyr Gly
```

```
<210> 1499
<211> 75
<212> PRT
<213> Homo sapiens

<400> 1499
Ser Cys Cys Leu Glu Asn Tyr Ser Phe Leu Ser Trp Ser Ala Asp Arg
 1               5                   10                  15


Asn Ser His Thr Asn Leu Ile Gly Leu Lys Cys Ile Phe Arg Gln Gln
            20                  25                  30


Gly Thr Lys Gln Arg Gly Thr Gly Leu Leu Asp Trp Arg Lys Ser Leu
            35                  40                  45


Leu Ala Trp Trp Ala Val Phe Gln Glu Arg Pro Cys Pro Cys Ser Leu
            50                  55                  60


Leu Gly Thr Phe Gln Phe Arg Phe Pro Leu Val
 65                  70                  75



<210> 1500
<211> 144
<212> PRT
<213> Homo sapiens

<400> 1500
Lys Arg Ser Trp Ala Gly Gly Arg Ala Arg Arg Lys Leu Phe Gly Gly
 1               5                   10                  15


Leu Val Trp Ile Leu Val Ala Ser Ser Asn Val Pro Leu Pro Leu Leu
            20                  25                  30


Gln Gly Trp Val Met Phe Val Ser Val Thr Ala Phe Phe Phe Ser Leu
            35                  40                  45


Leu Phe Leu Gly Met Phe Leu Ser Gly Met Val Ala Gln Ile Asp Ala
            50                  55                  60


Asn Trp Asn Phe Leu Asp Phe Ala Tyr His Phe Thr Val Phe Val Phe
 65                  70                  75                  80


Tyr Phe Gly Ala Phe Leu Leu Glu Ala Ala Ala Thr Ser Leu His Asp
                85                  90                  95
```

```
Leu His Cys Asn Thr Thr Ile Thr Gly Gln Pro Leu Leu Ser Asp Asn
            100             105              110

Gln Tyr Asn Ile Asn Val Ala Ala Ser Ile Phe Ala Phe Met Thr Thr
            115             120              125

Ala Cys Tyr Gly Cys Ser Leu Gly Leu Ala Leu Arg Arg Trp Arg Pro
    130             135              140
```

```
<210> 1501
<211> 123
<212> PRT
<213> Homo sapiens

<400> 1501
Val Leu Pro Gly Gly Ser Leu Lys Val Gln Lys Cys Cys Pro Lys Pro
    1           5               10              15

Ser Leu Asn Ile Ser Gly Asn Arg Ser Cys Ser Thr Met Gly Val Gln
            20              25              30

Cys Pro Cys Leu Pro Leu Thr Gln Leu Trp Phe Ile Leu Leu Val Cys
            35              40              45

Leu His Arg Pro Asp Ala Arg Val Pro Cys Leu Ile Leu His Leu Leu
    50              55              60

Ser His Trp Gly Ser Leu Pro Ser Asp Ala Leu Ala Lys Ile Ala Leu
    65              70              75              80

Val Cys Ser Arg Lys Glu Gly Gln Ile Pro Gly Ile Val Arg Ala Ala
                85              90              95

Glu Leu Tyr Arg Ile Gly Leu Pro Phe Pro Pro Val Trp Leu Ala Leu
            100             105             110

His Ser Leu Gln Ile Pro Pro Thr Ser Thr Gln
            115             120
```

```
<210> 1502
<211> 426
<212> PRT
<213> Homo sapiens
```

<400> 1502

```
Glu Ile Tyr Ser Leu Ser Arg Phe Ile Glu Val Lys Met Ser Lys Lys
 1               5                   10                  15

Ile Ser Gly Gly Ser Val Val Glu Met Gln Gly Asp Glu Met Thr Arg
            20                  25                  30

Ile Ile Trp Glu Leu Ile Lys Glu Lys Leu Ile Phe Pro Tyr Val Glu
            35                  40                  45

Leu Asp Leu His Ser Tyr Asp Leu Gly Ile Glu Asn Arg Asp Ala Thr
        50                  55                  60

Asn Asp Gln Val Thr Lys Asp Ala Ala Glu Ala Ile Lys Lys His Asn
65                  70                  75                  80

Val Gly Val Lys Cys Ala Thr Ile Thr Pro Asp Glu Lys Arg Val Glu
                85                  90                  95

Glu Phe Lys Leu Lys Gln Met Trp Lys Ser Pro Asn Gly Thr Ile Arg
            100                 105                 110

Asn Ile Leu Gly Gly Thr Val Phe Arg Glu Ala Ile Ile Cys Lys Asn
            115                 120                 125

Ile Pro Arg Leu Val Ser Gly Trp Val Lys Pro Ile Ile Ile Gly Arg
        130                 135                 140

His Ala Tyr Gly Asp Gln Tyr Arg Ala Thr Asp Phe Val Val Pro Gly
145                 150                 155                 160

Pro Gly Lys Val Glu Ile Thr Tyr Thr Pro Ser Asp Gly Thr Gln Lys
                165                 170                 175

Val Thr Tyr Leu Val His Asn Phe Glu Glu Gly Gly Gly Val Ala Met
            180                 185                 190

Gly Met Tyr Asn Gln Asp Lys Ser Ile Glu Asp Phe Ala His Ser Ser
            195                 200                 205

Phe Gln Met Ala Leu Ser Lys Gly Trp Pro Leu Tyr Leu Ser Thr Lys
            210                 215                 220

Asn Thr Ile Leu Lys Lys Tyr Asp Gly Arg Phe Lys Asp Ile Phe Gln
225                 230                 235                 240

Glu Ile Tyr Asp Lys Gln Tyr Lys Ser Gln Phe Glu Ala Gln Lys Ile
            245                 250                 255

Trp Tyr Glu His Arg Leu Ile Asp Asp Met Val Ala Gln Ala Met Lys
            260                 265                 270
```

Ser Glu Gly Gly Phe Ile Trp Ala Cys Lys Asn Tyr Asp Gly Asp Val
         275   280   285

Gln Ser Asp Ser Val Ala Gln Gly Tyr Gly Ser Leu Gly Met Met Thr
290   295   300

Ser Val Leu Val Cys Pro Asp Gly Lys Thr Val Glu Ala Glu Ala Ala
305   310   315   320

His Gly Thr Val Thr Arg His Tyr Arg Met Tyr Gln Lys Gly Gln Glu
                 325   330   335

Thr Ser Thr Asn Pro Ile Ala Ser Ile Phe Ala Trp Thr Arg Gly Leu
                 340   345   350

Ala His Arg Ala Lys Leu Asp Asn Asn Lys Glu Leu Ala Phe Phe Ala
         355   360   365

Asn Ala Leu Glu Glu Val Ser Ile Glu Thr Ile Glu Ala Gly Phe Met
         370   375   380

Thr Lys Asp Leu Ala Ala Cys Ile Lys Gly Leu Pro Asn Val Gln Arg
385   390   395   400

Ser Asp Tyr Leu Asn Thr Phe Glu Phe Met Asp Lys Leu Gly Glu Asn
                 405   410   415

Leu Lys Ile Lys Leu Ala Gln Ala Lys Leu
                 420   425

<210> 1503
<211> 65
<212> PRT
<213> Homo sapiens

<400> 1503
Phe Asn Lys Arg Lys Met Lys Tyr Ser Val Ala Tyr Ile Phe His Arg
  1   5   10   15

Ala His Glu His Leu Leu Tyr Leu Leu Gly Leu Ala Lys Ile Ile Tyr
                 20   25   30

Ser Ala Ala Leu Pro Lys Cys Leu His Thr Lys Leu Lys Val Val Leu
         35   40   45

Ile Tyr Val Ser Trp Lys Leu Phe Ile Lys Phe Lys Gly Ile Ser Phe
         50   55   60

Arg
65

<210> 1504
<211> 82
<212> PRT
<213> Homo sapiens

<400> 1504
Phe Phe Val Ile Pro Ser Ser Gly Ser Ile Cys Phe Cys Ser Leu Val
 1   5   10   15

Thr Val Leu Met Phe Asn Cys Cys Thr Leu Lys Pro Lys Ser Val Thr
             20   25   30

Met His Thr Val Thr Lys Val Leu Gly Leu Gln Ser Cys Leu Leu Tyr
         35   40   45

Lys Glu Asn Phe Lys Cys Cys Cys Lys Leu Thr Ser Tyr Thr Ile Leu
     50   55   60

Asn Phe Leu Ser Ser Pro Leu Phe Leu Pro Thr Asn Gly Ile Ile Met
 65   70   75   80

Leu Ala

<210> 1505
<211> 82
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1505
Glu Gly Cys Ala Ala Ala Met Ala Leu Arg Met Leu Trp Ala Gly Gln
 1   5   10   15

Ala Lys Gly Ile Leu Gly Gly Trp Gly Ile Ile Cys Leu Val Met Ser
             20   25   30

Leu Leu Leu Gln His Pro Gly Val Tyr Ser Lys Cys Tyr Phe Gln Ala
         35   40   45

```
Gln Ala Pro Cys His Tyr Glu Gly Lys Tyr Phe Thr Leu Gly Xaa Ser
    50                  55                  60

Trp Leu Arg Lys Asp Cys Phe His Cys Thr Cys Leu His Pro Val Ala
65                  70                  75                  80

Trp Ala
```

```
<210> 1506
<211> 419
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (404)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (405)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1506
Ala Arg Val Asp Arg Glu Thr Arg Ala Leu Ala Asp Ser His Phe Arg
    1               5                   10                  15

Gly Leu Gly Val Asp Val Pro Gly Val Gly Gln Ala Pro Gly Arg Val
                20              25                  30

Ala Phe Val Ser Glu Pro Gly Ala Phe Ser Tyr Ala Asp Phe Val Arg
            35              40                  45

Gly Phe Leu Leu Pro Asn Leu Pro Cys Val Phe Ser Ser Ala Phe Thr
        50              55                  60

Gln Gly Trp Gly Ser Arg Arg Arg Trp Val Thr Pro Ala Gly Arg Pro
65                  70                  75                  80

Asp Phe Asp His Leu Leu Arg Thr Tyr Gly Asp Val Val Val Pro Val
                85                  90                  95

Ala Asn Cys Gly Val Gln Glu Tyr Asn Ser Asn Pro Lys Glu His Met
            100             105                 110

Thr Leu Arg Asp Tyr Ile Thr Tyr Trp Lys Glu Tyr Ile Gln Ala Gly
        115             120                 125
```

```
Tyr Ser Ser Pro Arg Gly Cys Leu Tyr Leu Lys Asp Trp His Leu Cys
    130             135             140

Arg Asp Phe Pro Val Glu Asp Val Phe Thr Leu Pro Val Tyr Phe Ser
145             150             155             160

Ser Asp Trp Leu Asn Glu Phe Trp Asp Ala Leu Asp Val Asp Asp Tyr
            165             170             175

Arg Phe Val Tyr Ala Gly Pro Ala Gly Ser Trp Ser Pro Phe His Ala
            180             185             190

Asp Ile Phe Arg Ser Phe Ser Trp Ser Val Asn Val Cys Gly Arg Lys
        195             200             205

Lys Trp Leu Leu Phe Pro Pro Gly Gln Glu Glu Ala Leu Arg Asp Arg
    210             215             220

His Gly Asn Leu Pro Tyr Asp Val Thr Ser Pro Ala Leu Cys Asp Thr
225             230             235             240

His Leu His Pro Arg Asn Gln Leu Ala Gly Pro Pro Leu Glu Ile Thr
            245             250             255

Gln Glu Ala Gly Glu Met Val Phe Val Pro Ser Gly Trp His His Gln
            260             265             270

Val His Asn Leu Asp Asp Thr Ile Ser Ile Asn His Asn Trp Val Asn
        275             280             285

Gly Phe Asn Leu Ala Asn Met Trp Arg Phe Leu Gln Gln Glu Leu Cys
    290             295             300

Ala Val Gln Glu Glu Val Ser Glu Trp Arg Asp Ser Met Pro Asp Trp
305             310             315             320

His His His Cys Gln Val Ile Met Arg Ser Cys Ser Gly Ile Asn Phe
            325             330             335

Glu Glu Phe Tyr His Phe Leu Lys Val Ile Ala Glu Lys Arg Leu Leu
            340             345             350

Val Leu Arg Glu Ala Ala Ala Glu Asp Gly Ala Gly Leu Gly Phe Glu
        355             360             365

Gln Ala Ala Phe Asp Val Gly Arg Ile Thr Glu Val Leu Ala Ser Leu
    370             375             380

Val Ala His Pro Asp Phe Gln Arg Val Asp Thr Ser Ala Phe Ser Pro
385             390             395             400
```

```
Gln Pro Lys Xaa Xaa Leu Gln Gln Leu Arg Glu Ala Val Asp Ala Ala
            405             410             415
```

```
Ala Ala Pro
```

```
<210> 1507
<211> 220
<212> PRT
<213> Homo sapiens
```

```
<400> 1507
Pro Arg Val Arg Ser Gly Arg Thr Ile Met Gln Ser Ala Met Phe Leu
 1               5               10              15
```

```
Ala Val Gln His Asp Cys Arg Pro Met Asp Lys Ser Ala Gly Ser Gly
            20              25              30
```

```
His Lys Ser Glu Glu Lys Arg Glu Lys Met Lys Arg Thr Leu Leu Lys
            35              40              45
```

```
Asp Trp Lys Thr Arg Leu Ser Tyr Phe Leu Gln Asn Ser Ser Thr Pro
     50              55              60
```

```
Gly Lys Pro Lys Thr Gly Lys Lys Ser Lys Gln Gln Ala Phe Ile Lys
 65              70              75              80
```

```
Pro Ser Pro Glu Glu Ala Gln Leu Trp Ser Glu Ala Phe Asp Glu Leu
            85              90              95
```

```
Leu Ala Ser Lys Tyr Gly Leu Ala Ala Phe Arg Ala Phe Leu Lys Ser
            100             105             110
```

```
Glu Phe Cys Glu Glu Asn Ile Glu Phe Trp Leu Ala Cys Glu Asp Phe
        115             120             125
```

```
Lys Lys Thr Lys Ser Pro Gln Lys Leu Ser Ser Lys Ala Arg Lys Ile
    130             135             140
```

```
Tyr Thr Asp Phe Ile Glu Lys Glu Ala Pro Lys Glu Ile Asn Ile Asp
145             150             155             160
```

```
Phe Gln Thr Lys Thr Leu Ile Ala Gln Asn Ile Gln Glu Ala Thr Ser
            165             170             175
```

```
Gly Cys Phe Thr Thr Ala Gln Lys Arg Val Tyr Ser Leu Met Glu Asn
            180             185             190
```

```
Asn Ser Tyr Pro Arg Phe Leu Glu Ser Glu Phe Tyr Gln Asp Leu Cys
```

```
              195                 200                 205
Lys Lys Pro Gln Ile Thr Thr Glu Pro His Ala Thr
      210                 215                 220


<210> 1508
<211> 339
<212> PRT
<213> Homo sapiens

<400> 1508
Phe Gly Thr Arg Arg Ser Gly Cys Pro Ala Arg Gly His Ser Glu Pro
  1               5                  10                  15

Gly Gly Arg Glu Glu Gly Gly Met Pro Gln Thr Val Ile Leu Pro Gly
              20                  25                  30

Pro Ala Pro Trp Gly Phe Arg Leu Ser Gly Gly Ile Asp Phe Asn Gln
          35                  40                  45

Pro Leu Val Ile Thr Arg Ile Thr Pro Gly Ser Lys Ala Ala Ala Ala
      50                  55                  60

Asn Leu Cys Pro Gly Asp Val Ile Leu Ala Ile Asp Gly Phe Gly Thr
 65               70                  75                  80

Glu Ser Met Thr His Ala Asp Ala Gln Asp Arg Ile Lys Ala Ala Ala
              85                  90                  95

His Gln Leu Cys Leu Lys Ile Asp Arg Gly Glu Thr His Leu Trp Ser
          100                 105                 110

Pro Gln Val Ser Glu Asp Gly Lys Ala His Pro Phe Lys Ile Asn Leu
          115                 120                 125

Glu Ser Glu Pro Gln Glu Phe Lys Pro Ile Gly Thr Ala His Asn Arg
          130                 135                 140

Arg Ala Gln Pro Phe Val Ala Ala Ala Asn Ile Asp Asp Lys Arg Gln
145                 150                 155                 160

Val Val Ser Ala Ser Tyr Asn Ser Pro Ile Gly Leu Tyr Ser Thr Ser
              165                 170                 175

Asn Ile Gln Asp Ala Leu His Gly Gln Leu Arg Gly Leu Ile Pro Ser
          180                 185                 190

Ser Pro Gln Asn Glu Pro Thr Ala Ser Val Pro Pro Glu Ser Asp Val
          195                 200                 205
```

```
Tyr Arg Met Leu His Asp Asn Arg Asn Glu Pro Thr Gln Pro Arg Gln
    210             215             220

Ser Gly Ser Phe Arg Val Leu Gln Gly Met Val Asp Asp Gly Ser Asp
225             230             235             240

Asp Arg Pro Ala Gly Thr Arg Ser Val Arg Ala Pro Val Thr Lys Val
            245             250             255

His Gly Gly Ser Gly Gly Ala Gln Arg Met Pro Leu Cys Asp Lys Cys
        260             265             270

Gly Ser Gly Ile Val Gly Ala Val Val Lys Ala Arg Asp Lys Tyr Arg
        275             280             285

His Pro Glu Cys Phe Val Cys Ala Asp Cys Asn Leu Asn Leu Lys Gln
    290             295             300

Lys Gly Tyr Phe Phe Ile Glu Gly Glu Leu Tyr Cys Glu Thr His Ala
305             310             315             320

Arg Ala Arg Thr Lys Pro Pro Glu Gly Tyr Asp Thr Val Thr Leu Tyr
            325             330             335

Pro Lys Ala
```

```
<210> 1509
<211> 388
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (226)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1509
Leu Gly Arg Val Ser Met Ser Leu Gly Trp Leu Glu Arg Pro Pro Ala
  1             5              10             15

Leu Ser Arg Ala Ala Gly Asp Gly Ala Arg Arg Leu Ser Gly Ser Arg
            20             25              30

Arg Gly Asp Val Trp Leu Thr Ser Ser Ala Ala Gly Leu Leu Arg Ser
        35             40             45

Val Ala Gly Gly Ser Trp Cys Gly Gly Gln Leu Arg Ala Arg Gly Gly
```

```
                 50                      55                      60

         Ser Gly Arg Cys Val Ala Arg Ala Met Thr Gly Asn Ala Gly Glu Trp
         65              70              75              80

         Cys Leu Met Glu Ser Asp Pro Gly Val Phe Thr Glu Leu Ile Lys Gly
                         85              90              95

         Phe Gly Cys Arg Gly Ala Gln Val Glu Glu Ile Trp Ser Leu Glu Pro
                     100             105             110

         Glu Asn Phe Glu Lys Leu Lys Pro Val His Gly Leu Ile Phe Leu Phe
                     115             120             125

         Lys Trp Gln Pro Gly Glu Glu Pro Ala Gly Ser Val Val Gln Asp Ser
             130             135             140

         Arg Leu Asp Thr Ile Phe Phe Ala Lys Gln Val Ile Asn Asn Ala Cys
         145             150             155             160

         Ala Thr Gln Ala Ile Val Ser Val Leu Leu Asn Cys Thr His Gln Asp
                     165             170             175

         Val His Leu Gly Glu Thr Leu Ser Glu Phe Lys Glu Phe Ser Gln Ser
                     180             185             190

         Phe Asp Ala Ala Met Lys Gly Leu Ala Leu Ser Asn Ser Asp Val Ile
                     195             200             205

         Arg Gln Val His Asn Ser Phe Ala Arg Gln Gln Met Phe Glu Phe Asp
             210             215             220

         Thr Xaa Thr Ser Ala Lys Glu Glu Asp Ala Phe His Phe Val Ser Tyr
         225             230             235             240

         Val Pro Val Asn Gly Arg Leu Tyr Glu Leu Asp Gly Leu Arg Glu Gly
                     245             250             255

         Pro Ile Asp Leu Gly Ala Cys Asn Gln Asp Asp Trp Phe Ser Ala Val
                     260             265             270

         Arg Pro Val Ile Glu Lys Arg Ile Gln Lys Tyr Ser Glu Gly Glu Ile
                     275             280             285

         Arg Phe Asn Leu Met Ala Ile Val Ser Asp Arg Lys Met Ile Tyr Glu
                     290             295             300

         Gln Lys Ile Ala Glu Leu Gln Arg Gln Leu Ala Glu Glu Pro Met Asp
         305             310             315             320

         Thr Asp Gln Gly Asn Ser Met Leu Ser Ala Ile Gln Ser Glu Val Ala
```

```
                325                      330                      335
```

Lys Asn Gln Met Leu Ile Glu Glu Glu Val Gln Lys Leu Lys Arg Tyr
            340   345   350

Lys Ile Glu Asn Ile Arg Arg Lys His Asn Tyr Leu Pro Phe Ile Met
            355   360   365

Glu Leu Leu Lys Thr Leu Ala Glu His Gln Gln Leu Ile Pro Leu Val
        370   375   380

Glu Lys Gly Lys
385

<210> 1510
<211> 260
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (249)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1510
Arg Gly Gln Val Pro Ser Ser Ser Leu Ala His Gly Cys Val Arg Pro
  1   5   10   15

Gly Glu Pro Ser Trp Pro Gly Glu Pro Ser Trp Pro Ala Arg Val Leu
            20   25   30

Arg Arg Arg Gln Val Leu Tyr Pro Arg Phe Gln Ser Arg Gly Pro Gln
        35   40   45

Gly Val Glu Asp Gly Asp Arg Pro Gln Pro Ser Ser Lys Thr Pro Arg
    50   55   60

Ile Pro Lys Ile Tyr Thr Lys Thr Gly Asp Lys Gly Phe Ser Ser Thr
65   70   75   80

Phe Thr Gly Glu Arg Arg Pro Lys Asp Asp Gln Val Phe Glu Ala Val
            85   90   95

Gly Thr Thr Asp Glu Leu Ser Ser Ala Ile Gly Phe Ala Leu Glu Leu
            100   105   110

Val Thr Glu Lys Gly His Thr Phe Ala Glu Glu Leu Gln Lys Ile Gln
            115   120   125

```
Cys Thr Leu Gln Asp Val Gly Ser Ala Leu Ala Thr Pro Cys Ser Ser
    130             135             140

Ala Arg Glu Ala His Leu Lys Tyr Thr Thr Phe Lys Ala Gly Pro Ile
145             150             155             160

Leu Glu Leu Glu Gln Trp Ile Asp Lys Tyr Thr Ser Gln Leu Pro Pro
            165             170             175

Leu Thr Ala Phe Ile Leu Pro Ser Gly Gly Lys Ile Ser Ser Ala Leu
            180             185             190

His Phe Cys Arg Ala Val Cys Arg Arg Ala Glu Arg Arg Val Val Pro
            195             200             205

Leu Val Gln Met Gly Glu Thr Asp Ala Asn Val Ala Lys Phe Leu Asn
    210             215             220

Arg Leu Ser Asp Tyr Leu Phe Thr Leu Ala Arg Tyr Ala Ala Met Lys
225             230             235             240

Glu Gly Asn Gln Glu Lys Ile Tyr Xaa Lys Asn Asp Pro Ser Ala Glu
            245             250             255

Ser Glu Gly Leu
            260


<210> 1511
<211> 288
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (162)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1511
Gln His Phe His Phe Arg Lys Pro Thr Asp Val Leu Gln Thr Val Lys
  1             5             10              15

Leu Leu Asp Leu Ser Ser Asn Gln Leu Ile Asp Glu Asn Gln Leu Tyr
            20              25              30

Leu Ile Ala His Leu Pro Arg Leu Glu Gln Leu Ile Leu Ser Asp Thr
            35              40              45

Gly Ile Ser Ser Leu His Phe Pro Asp Ala Gly Ile Gly Cys Lys Thr
    50              55              60
```

```
Ser Met Phe Pro Ser Leu Lys Tyr Leu Val Val Asn Asp Asn Gln Ile
 65              70              75                      80

Ser Gln Trp Ser Phe Phe Asn Glu Leu Glu Lys Leu Pro Ser Leu Arg
             85                  90                  95

Ala.Leu Ser Cys Leu Arg Asn Pro Leu Thr Lys Glu Asp Lys Glu Ala
             100             105             110

Glu Thr Ala Arg Leu Leu Ile Ile Ala Ser Ile Gly Gln Leu Lys Thr
             115             120             125

Leu Asn Lys Cys Glu Ile Leu Pro Glu Glu Arg Arg Arg Ala Glu Leu
     130             135             140

Asp Tyr Arg Lys Ala Phe Gly Asn Glu Trp Lys Gln Ala Gly Gly His
145             150             155             160

Lys Xaa Pro Glu Lys Asn Arg Leu Ser Glu Glu Phe Leu Thr Ala His
             165             170             175

Pro Arg Tyr Gln Phe Leu Cys Leu Lys Tyr Gly Ala Pro Glu Asp Trp
             180             185             190

Glu Leu Lys Thr Gln Gln Pro Leu Met Leu Lys Asn Gln Leu Leu Thr
             195             200             205

Leu Lys Ile Lys Tyr Pro His Gln Leu Asp Gln Lys Val Leu Glu Lys
     210             215             220

Gln Leu Pro Gly Ser Met Thr Ile Gln Lys Val Lys Gly Leu Leu Ser
225             230             235             240

Arg Leu Leu Lys Val Pro Val Ser Asp Leu Leu Leu Ser Tyr Glu Ser
             245             250             255

Pro Lys Lys Pro Gly Arg Glu Ile Glu Leu Glu Asn Asp Leu Lys Ser
             260             265             270

Leu Gln Phe Tyr Ser Val Glu Asn Gly Asp Cys Leu Leu Val Arg Trp
             275             280             285
```

<210> 1512
<211> 123
<212> PRT

<213> Homo sapiens

<220>
<221> SITE
<222> (73)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1512
Lys Cys Pro Arg Glu Pro Leu Val His Arg Arg Phe Val Ser Thr Leu
 1   5   10   15

Pro Ile Phe Thr Ala Leu Ala Leu Gln Ala Trp Gly Ser Ile Cys Ser
             20   25   30

Ser His Val Lys Ser Gly Pro Ala Phe Leu Asn Ser Val Gln Ala Asp
         35   40   45

Leu Phe Ser Cys Thr Gly Ile Ser Tyr Gln Pro Asn Ile Cys Ile Glu
     50   55   60

Gln Arg Gly Leu Cys Ala Pro Pro Xaa Met Ala Ala Met Met Ala Ala
 65   70   75   80

Val Ile His Ala His Leu Gln Thr Ser Gln Ser Gly Ser Glu Met Ser
                 85   90   95

Thr Asn Ile Cys Gly Arg Lys Gly Tyr Thr Asp His Pro Val Val Leu
                 100   105   110

Gln Leu Tyr Arg Ala Arg Lys Gly Cys Gly Lys
             115   120

<210> 1513
<211> 108
<212> PRT
<213> Homo sapiens

<400> 1513
Ala Asp Gly Gly Trp Gly Glu Asp Phe Glu Ser Cys Glu Glu Arg Arg
 1   5   10   15

Tyr Val Gln Ser Ala Gln Ser Gln Ile His Asn Thr Cys Trp Ala Met
             20   25   30

Met Gly Leu Met Ala Val Arg His Pro Asp Ile Glu Ala Gln Glu Arg
         35   40   45

Gly Val Arg Cys Leu Leu Glu Lys Gln Leu Pro Asn Gly Asp Trp Pro
     50   55   60

Gln Glu Asn Ile Ala Gly Val Phe Asn Lys Ser Cys Ala Ile Ser Tyr
65   70   75   80

Thr Ser Tyr Arg Asn Ile Phe Pro Ile Trp Ala Leu Gly Arg Phe Ser
                85   90   95

Gln Leu Tyr Pro Glu Arg Ala Leu Ala Gly His Pro
            100   105

<210> 1514
<211> 33
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1514
Ser Trp Xaa Ser Thr Ala Val Ala Ala Ala Leu Glu Leu Val Asp Pro
1   5   10   15

Pro Gly Cys Arg Asn Ser Ala Arg Val Ser Leu Phe Val Cys Phe Phe
            20   25   30

Leu

<210> 1515
<211> 479
<212> PRT
<213> Homo sapiens

<400> 1515
Gly Thr Arg Arg Pro Ser Ser Ser Val Arg Ser Gly Ser Trp Ser Arg
1   5   10   15

Leu Pro Gly Tyr Arg Gly Ala Ser Met Thr Thr Met Ala Ala Ala Thr
            20   25   30

Leu Leu Arg Ala Thr Pro His Phe Ser Gly Leu Ala Ala Gly Arg Thr
            35   40   45

Phe Leu Leu Gln Gly Leu Leu Arg Leu Leu Lys Ala Pro Ala Leu Pro
            50   55   60

```
Leu Leu Cys Arg Gly Leu Ala Val Glu Ala Lys Lys Thr Tyr Val Arg
65                  70              75                  80

Asp Lys Pro His Val Asn Val Gly Thr Ile Gly His Val Asp His Gly
                85              90              95

Lys Thr Thr Leu Thr Ala Ala Ile Thr Lys Ile Leu Ala Glu Gly Gly
            100             105             110

Gly Ala Lys Phe Lys Lys Tyr Glu Glu Ile Asp Asn Ala Pro Glu Glu
        115             120             125

Arg Ala Arg Gly Ile Thr Ile Asn Ala Ala His Val Glu Tyr Ser Thr
    130             135             140

Ala Ala Arg His Tyr Ala His Thr Asp Cys Pro Gly His Ala Asp Tyr
145             150             155             160

Val Lys Asn Met Ile Thr Gly Thr Ala Pro Leu Asp Gly Cys Ile Leu
            165             170             175

Val Val Ala Ala Asn Asp Gly Pro Met Pro Gln Thr Arg Glu His Leu
        180             185             190

Leu Leu Ala Arg Gln Ile Gly Val Glu His Val Val Val Tyr Val Asn
        195             200             205

Lys Ala Asp Ala Val Gln Asp Ser Glu Met Val Glu Leu Val Glu Leu
    210             215             220

Glu Ile Arg Glu Leu Leu Thr Glu Phe Gly Tyr Lys Gly Glu Glu Thr
225             230             235             240

Pro Val Ile Val Gly Ser Ala Leu Cys Ala Leu Glu Gly Arg Asp Pro
            245             250             255

Glu Leu Gly Leu Lys Ser Val Gln Lys Leu Leu Asp Ala Val Asp Thr
        260             265             270

Tyr Ile Pro Val Pro Ala Arg Asp Leu Glu Lys Pro Phe Leu Leu Pro
        275             280             285

Val Glu Ala Val Tyr Ser Val Pro Gly Arg Gly Thr Val Val Thr Gly
    290             295             300

Thr Leu Glu Arg Gly Ile Leu Lys Lys Gly Asp Glu Cys Glu Leu Leu
305             310             315             320

Gly His Ser Lys Asn Ile Arg Thr Val Val Thr Gly Ile Glu Met Phe
            325             330             335
```

```
His Lys Ser Leu Glu Arg Ala Glu Ala Gly Asp Asn Leu Gly Ala Leu
            340             345             350

Val Arg Gly Leu Lys Arg Glu Asp Leu Arg Arg Gly Leu Val Met Val
        355             360             365

Lys Pro Gly Ser Ile Lys Pro His Gln Lys Val Glu Ala Gln Val Tyr
    370             375             380

Ile Leu Ser Lys Glu Glu Gly Gly Arg His Lys Pro Phe Val Ser His
385             390             395             400

Phe Met Pro Val Met Phe Ser Leu Thr Trp Asp Met Ala Cys Arg Ile
            405             410             415

Ile Leu Pro Pro Glu Lys Glu Leu Ala Met Pro Gly Glu Asp Leu Lys
            420             425             430

Phe Asn Leu Ile Leu Arg Gln Pro Met Ile Leu Glu Lys Gly Gln Arg
        435             440             445

Phe Thr Leu Arg Asp Gly Asn Arg Thr Ile Gly Thr Gly Leu Val Thr
    450             455             460

Asn Thr Leu Ala Met Thr Glu Glu Lys Asn Ile Lys Trp Gly
465             470             475
```

```
<210> 1516
<211> 627
<212> PRT
<213> Homo sapiens

<400> 1516
Arg Gln Glu Leu Ile Trp Pro Leu Cys Ser Pro Pro Gln Gly Asp Arg
  1             5             10              15

Phe Leu Gln Lys Ser Trp Ile Phe Phe Arg Pro Val Met Ala Asp Lys
            20              25              30

Leu Thr Arg Ile Ala Ile Val Asn His Asp Lys Cys Lys Pro Lys Lys
            35              40              45

Cys Arg Gln Glu Cys Lys Lys Ser Cys Pro Val Val Arg Met Gly Lys
    50              55              60

Leu Cys Ile Glu Val Thr Pro Gln Ser Lys Ile Ala Trp Ile Ser Glu
  65              70              75              80
```

Thr Leu Cys Ile Gly Cys Gly Ile Cys Ile Lys Lys Cys Pro Phe Gly
              85   90   95

Ala Leu Ser Ile Val Asn Leu Pro Ser Asn Leu Glu Lys Glu Thr Thr
              100   105   110

His Arg Tyr Cys Ala Asn Ala Phe Lys Leu His Arg Leu Pro Ile Pro
          115   120   125

Arg Pro Gly Glu Val Leu Gly Leu Val Gly Thr Asn Gly Ile Gly Lys
    130   135   140

Ser Thr Ala Leu Lys Ile Leu Ala Gly Lys Gln Lys Pro Asn Leu Gly
145   150   155   160

Lys Tyr Asp Asp Pro Pro Asp Trp Gln Glu Ile Leu Thr Tyr Phe Arg
              165   170   175

Gly Ser Glu Leu Gln Asn Tyr Phe Thr Lys Ile Leu Glu Asp Asp Leu
          180   185   190

Lys Ala Ile Ile Lys Pro Gln Tyr Val Asp Gln Ile Pro Lys Ala Ala
          195   200   205

Lys Gly Thr Val Gly Ser Ile Leu Asp Arg Lys Asp Glu Thr Lys Thr
    210   215   220

Gln Ala Ile Val Cys Gln Gln Leu Asp Leu Thr His Leu Lys Glu Arg
225   230   235   240

Asn Val Glu Asp Leu Ser Gly Gly Glu Leu Gln Arg Phe Ala Cys Ala
              245   250   255

Val Val Cys Ile Gln Lys Ala Asp Ile Phe Met Phe Asp Glu Pro Ser
          260   265   270

Ser Tyr Leu Asp Val Lys Gln Arg Leu Lys Ala Ala Ile Thr Ile Arg
          275   280   285

Ser Leu Ile Asn Pro Asp Arg Tyr Ile Ile Val Val Glu His Asp Leu
    290   295   300

Ser Val Leu Asp Tyr Leu Ser Asp Phe Ile Cys Cys Leu Tyr Gly Val
305   310   315   320

Pro Ser Ala Tyr Gly Val Val Thr Met Pro Phe Ser Val Arg Glu Gly
              325   330   335

Ile Asn Ile Phe Leu Asp Gly Tyr Val Pro Thr Glu Asn Leu Arg Phe
              340   345   350

Arg Asp Ala Ser Leu Val Phe Lys Val Ala Glu Thr Ala Asn Glu Glu
        355   360   365

Glu Val Lys Lys Met Cys Met Tyr Lys Tyr Pro Gly Met Lys Lys Lys
        370   375   380

Met Gly Glu Phe Glu Leu Ala Ile Val Ala Gly Glu Phe Thr Asp Ser
385   390   395   400

Glu Ile Met Val Met Leu Gly Glu Asn Gly Thr Gly Lys Thr Thr Phe
                405   410   415

Ile Arg Met Leu Ala Gly Arg Leu Lys Pro Asp Glu Gly Gly Glu Val
            420   425   430

Pro Val Leu Asn Val Ser Tyr Lys Pro Gln Lys Ile Ser Pro Lys Ser
        435   440   445

Thr Gly Ser Val Arg Gln Leu Leu His Glu Lys Ile Arg Asp Ala Tyr
    450   455   460

Thr His Pro Gln Phe Val Thr Asp Val Met Lys Pro Leu Gln Ile Glu
465   470   475   480

Asn Ile Ile Asp Gln Glu Val Gln Thr Leu Ser Gly Gly Glu Leu Gln
            485   490   495

Arg Val Ala Leu Ala Leu Cys Leu Gly Lys Pro Ala Asp Val Tyr Leu
            500   505   510

Ile Asp Glu Pro Ser Ala Tyr Leu Asp Ser Glu Gln Arg Leu Met Ala
        515   520   525

Ala Arg Val Val Lys Arg Phe Ile Leu His Ala Lys Lys Thr Ala Phe
    530   535   540

Val Val Glu His Asp Phe Ile Met Ala Thr Tyr Leu Ala Asp Arg Val
545   550   555   560

Ile Val Phe Asp Gly Val Pro Ser Lys Asn Thr Val Ala Asn Ser Pro
            565   570   575

Gln Thr Leu Leu Ala Gly Met Asn Lys Phe Leu Ser Gln Leu Glu Ile
        580   585   590

Thr Phe Arg Arg Asp Pro Asn Asn Tyr Arg Pro Arg Ile Asn Lys Leu
        595   600   605

Asn Ser Ile Lys Asp Val Glu Gln Lys Lys Ser Gly Asn Tyr Phe Phe
        610   615   620

Leu Asp Asp
625

<210> 1517
<211> 104
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (93)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (94)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1517
Ala Pro Gln Pro Pro Pro Thr Gly Gln Ser Asp Tyr Thr Lys Ala Trp
 1   5   10   15

Glu Glu Tyr Tyr Lys Lys Ile Gly Gln Gln Pro Gln Gln Pro Gly Ala
                20   25   30

Pro Pro Gln Gln Asp Tyr Thr Lys Ala Trp Glu Glu Tyr Tyr Lys Lys
            35   40   45

Gln Ala Gln Val Ala Thr Gly Gly Val Gln Glu Leu Pro Gln Ala Pro
        50   55   60

Ser Gln Thr Thr Val Pro Pro Gly Glu Tyr Tyr Arg Gln Gln Ala Ala
 65   70   75   80

Tyr Tyr Gly Gln Thr Pro Gly Pro Gly Gly Pro Gln Xaa Xaa Pro Thr
                85   90   95

Gln Gln Gly Gln Gln Gln Ala Gln
                100

<210> 1518
<211> 149
<212> PRT
<213> Homo sapiens

<400> 1518
His Met Thr Thr Val Ser Pro Asp Cys Val Glu Cys Met Ala Cys Ser

```
         1                    5                     10                    15
       Asp Asn Thr Val Arg Ala Gly Leu Thr Pro Lys Phe Ile Asp Val Pro
                   20                    25                    30

       Thr Leu Cys Glu Met Leu Ser Tyr Thr Pro Ser Ser Ser Lys Asp Arg
                   35                    40                    45

       Leu Phe Leu Pro Thr Arg Ser Gln Glu Asp Pro Tyr Leu Ser Ile Tyr
                   50                    55                    60

       Asp Pro Pro Val Pro Asp Phe Thr Ile Met Lys Thr Glu Val Pro Gly
       65                    70                    75                    80

       Ser Val Thr Glu Tyr Lys Val Leu Ala Leu Asp Ser Ala Ser Ile Leu
                         85                    90                    95

       Leu Met Val Gln Gly Thr Val Ile Ala Ser Thr Pro Thr Thr Gln Thr
                   100                   105                   110

       Pro Ile Pro Leu Gln Arg Gly Gly Val Leu Phe Ile Gly Ala Asn Glu
                   115                   120                   125

       Ser Val Ser Leu Lys Leu Thr Glu Pro Lys Asp Leu Leu Ile Phe Arg
                   130                   135                   140

       Ala Cys Cys Leu Leu
       145
```

<210> 1519
<211> 616
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (262)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1519
```
       Ser Trp Gln Val Gln Gly Pro Pro Pro Arg Glu Xaa Cys Pro Ser Cys
       1                    5                     10                    15

       Thr Gln Ser Ala Ile Arg Gly Ser Cys Thr Leu Leu Leu Arg Ala Gly
```

```
                    20                          25                          30

        Glu Asp Ser Ala Asp Gln Gly Arg Gly Gln Gln Gln His Phe His Phe
                35                      40                45

        His Thr Ser Ile Phe Leu Arg Gly Pro Pro Gly Ser Ser Pro Gln Pro
                50                      55                60

        Ala Pro Leu Arg Leu Arg Asp Trp Ala Leu Cys Leu Gly Leu His Asn
        65                      70                75                      80

        Phe Val Ser Pro Asn Trp Leu Ser Arg Thr Tyr Ser Ser His Val Ser
                        85                90                      95

        Trp Ile Thr Gly Gln Ala Met Glu Ile Gly Ser Ala Ala Leu Thr Ile
                        100               105               110

        Leu Val Glu Cys Trp Asp Gly His Leu Thr Pro Pro Glu Val Ala Ser
                115                     120               125

        Leu Ala Asp Arg Ala Ser Arg Ala Arg Asp Ser Asn Met Val Arg Ala
                130                     135               140

        Ala Ala Glu Leu Ala Leu Ser Cys Leu Pro His Ala His Ala Leu Asn
        145                     150               155                     160

        Pro Asn Glu Ile Gln Arg Ala Leu Val Gln Cys Lys Glu Gln Asp Asn
                        165               170                     175

        Leu Met Leu Glu Lys Ala Cys Met Ala Val Glu Glu Ala Ala Lys Gly
                        180               185                     190

        Gly Gly Val Tyr Pro Glu Val Leu Phe Glu Val Ala His Gln Trp Phe
                195                     200               205

        Trp Leu Tyr Glu Gln Thr Ala Gly Gly Ser Ser Thr Ala Arg Glu Gly
                210                     215               220

        Ala Thr Ser Cys Ser Ala Ser Gly Ile Arg Ala Gly Gly Glu Ala Gly
        225                     230               235                     240

        Arg Gly Met Pro Glu Gly Arg Gly Gly Pro Gly Thr Glu Pro Val Thr
                        245               250                     255

        Val Ala Ala Ala Gln Xaa Thr Ala Ala Ala Thr Val Val Pro Val Ile
                        260               265                     270

        Ser Val Gly Ser Ser Leu Tyr Pro Gly Pro Gly Leu Gly His Gly His
                275                     280               285

        Ser Pro Gly Leu His Pro Tyr Thr Ala Leu Gln Pro His Leu Pro Cys
```

```
                290                    295                    300

        Ser Pro Gln Tyr Leu Thr His Pro Ala His Pro Ala His Pro Met Pro
        305                 310                 315                 320

        His Met Pro Arg Pro Ala Val Phe Pro Val Pro Ser Ser Ala Tyr Pro
                        325             330                 335

        Gln Gly Val His Pro Ala Phe Leu Gly Ala Gln Tyr Pro Tyr Ser Val
                    340             345             350

        Thr Pro Pro Ser Leu Ala Ala Thr Ala Val Ser Phe Pro Val Pro Ser
                355             360             365

        Met Ala Pro Ile Thr Val His Pro Tyr His Thr Glu Pro Gly Leu Pro
            370             375             380

        Leu Pro Thr Ser Val Ala Leu Ser Ser Val His Pro Ala Ser Thr Phe
        385             390             395             400

        Pro Ala Ile Gln Gly Ala Ser Leu Pro Ala Leu Thr Thr Gln Pro Ser
                    405             410             415

        Pro Leu Val Ser Gly Gly Phe Pro Pro Pro Glu Glu Glu Thr His Ser
                    420             425             430

        Gln Pro Val Asn Pro His Ser Leu His His Leu His Ala Ala Tyr Arg
                435             440             445

        Val Gly Met Leu Ala Leu Glu Met Leu Gly Arg Arg Ala His Asn Asp
                450             455             460

        His Pro Asn Asn Phe Ser Arg Ser Pro Pro Tyr Thr Asp Asp Val Lys
        465             470             475             480

        Trp Leu Leu Gly Leu Ala Ala Lys Leu Gly Val Asn Tyr Val His Gln
                    485             490             495

        Phe Cys Val Gly Ala Ala Lys Gly Val Leu Ser Pro Phe Val Leu Gln
                    500             505             510

        Glu Ile Val Met Glu Thr Leu Gln Arg Leu Ser Pro Ala His Ala His
                515             520             525

        Asn His Leu Arg Ala Pro Ala Phe His Gln Leu Val Gln Arg Cys Gln
                530             535             540

        Gln Ala Tyr Met Gln Tyr Ile His His Arg Leu Ile His Leu Thr Pro
        545             550             555             560

        Ala Asp Tyr Asp Asp Phe Val Asn Ala Ile Arg Ser Ala Arg Ser Ala
```

```
                565                    570                    575
     Phe Cys Leu Thr Pro Met Gly Met Met Gln Phe Asn Asp Ile Leu Gln
                580                    585                590

     Asn Leu Lys Arg Ser Lys Gln Thr Lys Glu Leu Trp Gln Arg Val Ser
                595                    600                605

     Leu Glu Met Ala Thr Phe Ser Pro
                610                    615
```

```
<210> 1520
<211> 159
<212> PRT
<213> Homo sapiens

<400> 1520
Glu Gly Ser Arg Pro Pro Leu Cys Arg Ser Cys Ile Ser Ala Glu Ser
  1               5                  10                  15

Val Phe Gln Pro Gln Leu Val Ala Pro Leu Ala Pro Leu Leu Pro Asp
                20                  25                  30

Gly His Val Phe Val Thr Leu Glu Asn Lys Gln Pro His Thr His Phe
                35                  40                  45

Phe Phe Ser Phe Lys Thr Val Thr Trp Lys Tyr Glu Lys Ala Arg Arg
      50                  55                  60

Arg Ser Lys Gly Cys Phe Leu Glu Trp Leu Arg Cys Cys Pro Ala Val
 65                  70                  75                  80

Val Ile Val Phe Ser Thr Gly Leu Phe Pro Phe Ile Ser Cys Gly Thr
                85                  90                  95

Glu Ser Leu Leu Pro Pro Leu Leu Gly Ser Pro Gly Gly Pro Trp Pro
                100                 105                 110

Pro Phe Arg Leu Ser Lys Lys Pro Thr Thr Leu Glu Ile Phe Phe Leu
                115                 120                 125

Glu Phe Arg Cys Phe Leu Leu Leu Pro Leu Asp Lys Lys Gln Leu Lys
                130                 135                 140

Arg Pro Tyr Leu Arg Asp Glu Lys Asn Met His Ile Asn Ser Ile
145                 150                 155
```

```
<210> 1521
<211> 129
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1521
Glu Trp Ala Glu Cys Arg Gly Gln Leu Val Gln Xaa Ser Arg Pro Glu
 1               5                  10                  15

Val Ser Ala Gly Ser Leu Leu Leu Pro Ala Pro Gln Ala Glu Asp His
             20                  25                  30

Ser Ser Arg Ile Leu Tyr Pro Arg Pro Lys Ser Leu Leu Pro Lys Met
         35                  40                  45

Met Asn Ala Asp Met Asp Ala Val Asp Ala Glu Asn Gln Val Glu Leu
     50                  55                  60

Glu Glu Lys Thr Arg Leu Ile Asn Gln Val Leu Glu Leu Gln His Thr
 65                  70                  75                  80

Leu Glu Asp Leu Ser Ala Arg Val Asp Ala Val Lys Glu Glu Asn Leu
             85                  90                  95

Lys Leu Lys Ser Glu Asn Gln Val Leu Gly Gln Tyr Ile Glu Asn Leu
            100                 105                 110

Met Ser Ala Ser Ser Val Phe Gln Thr Thr Asp Thr Lys Ser Lys Arg
            115                 120                 125

Lys
```

```
<210> 1522
<211> 109
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
```

<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1522
Ala Gly Thr Glu Pro Gly Val Lys Cys Ser Ala Lys Val His Asp Pro
1   5   10   15

Leu Arg Ser His Trp Ala Asp Leu Thr Ser Asp Ser Leu Val Val Gln
            20   25   30

Met Pro Cys Ala Ala Phe Pro Glu Ala Ile Gly Gly Leu Pro Ala Ala
            35   40   45

Glu Ile Tyr Ala Gly His Pro Leu Asn Xaa Cys His Ser Lys Gly Gly
    50   55   60

Pro Arg Cys Ser Ser Xaa Ser Phe Thr Cys Gly Gly Val Gly Glu Xaa
65   70   75   80

Ala Val Ser Glu Met Gln Val Pro Arg Ser His Pro Gly Leu Leu Lys
            85   90   95

Gly Cys Gly Ile Cys Val Ser Asp Ala Tyr Tyr Asn Met
            100   105

<210> 1523
<211> 53
<212> PRT
<213> Homo sapiens

<400> 1523
Gly Thr Ser Ser Cys Leu Ser Leu Pro Glu Tyr Trp Asp Tyr Arg Leu
1   5   10   15

Phe Leu Phe Lys His Lys Ser Phe Lys Leu Val Leu Thr Leu Tyr Ser
            20   25   30

Ala Leu Asp Cys Phe Ser Phe Cys Ser Val Ile Met Ser Leu Val Gly
            35   40   45

Asp Ile Leu His Arg
    50

```
<210> 1524
<211> 111
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (107)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1524
Ile Leu Asn Val Lys Ile Ile Asp Leu Asp Ile Glu Ser Ile Ser Asp
 1               5                  10                  15

Ser Arg Asp Thr Pro Ile Cys Leu Lys Gln Pro Lys Met Tyr Trp Leu
                20                  25                  30

Trp Asn His Val Leu Asp Arg Phe Leu Arg Pro Val Ser Ser Asn Leu
            35                  40                  45

Asp Thr Val Phe Lys Gly Gly Leu Leu Thr Cys Thr Val Gly Gln Ile
        50                  55                  60

Ile Gln Ile Tyr Leu Arg Leu Gly Lys Lys Val Ile Cys Asp Phe Ala
65                  70                  75                  80

Gly Arg Ala Phe Ala Lys Trp Ser Thr Gly Ser Lys Arg Val Phe Leu
                85                  90                  95

Glu Arg Ala Ile Leu Ser Asn Glu Val Ser Xaa Arg Thr Leu Gly
                100                 105                 110


<210> 1525
<211> 253
<212> PRT
<213> Homo sapiens

<400> 1525
Leu Ser Gln Arg Gln Asp Gln Val Pro Arg Leu Pro Val Gln Lys Ser
 1               5                  10                  15

Arg Gln Glu Ser Pro Arg Ala Glu Glu Asn Pro Lys Trp Arg Glu Gly
                20                  25                  30

Lys Lys Glu Thr Ser Glu Ser Ser Val Gln Lys Ala Gly Arg Ala Ala
                35                  40                  45
```

```
Ala Ala Gln Ala Gly Ala Ala Ala Ser Arg Val Pro Gly Leu Ser Gly
    50              55              60

Ser Asn Leu Ala Pro Cys Asn Lys Gly Arg Leu Ser Ala Arg Glu Asp
    65              70              75              80

Val Ser Asn Ser Lys Met Gln Ala Gln Gln Tyr Gln Gln Gln Arg Arg
                85              90              95

Lys Phe Ala Ala Ala Phe Leu Ala Phe Ile Phe Ile Leu Ala Ala Val
            100             105             110

Asp Thr Ala Glu Ala Gly Lys Lys Glu Lys Pro Glu Lys Lys Val Lys
        115             120             125

Lys Ser Asp Cys Gly Glu Trp Gln Trp Ser Val Cys Val Pro Thr Ser
    130             135             140

Gly Asp Cys Gly Leu Gly Thr Arg Glu Gly Thr Arg Thr Gly Ala Glu
145             150             155             160

Cys Lys Gln Thr Met Lys Thr Gln Arg Cys Lys Ile Pro Cys Asn Trp
            165             170             175

Lys Lys Gln Phe Gly Ala Glu Cys Lys Tyr Gln Phe Gln Ala Trp Gly
            180             185             190

Glu Cys Asp Leu Asn Thr Ala Leu Lys Thr Arg Thr Gly Ser Leu Lys
        195             200             205

Arg Ala Leu His Asn Ala Glu Cys Gln Lys Thr Val Thr Ile Ser Lys
    210             215             220

Pro Cys Gly Lys Leu Thr Lys Pro Lys Pro Gln Ala Glu Ser Lys Lys
225             230             235             240

Lys Lys Lys Glu Gly Lys Lys Gln Glu Lys Met Leu Asp
                245             250
```

```
<210> 1526
<211> 93
<212> PRT
<213> Homo sapiens

<400> 1526
Pro Cys Thr Lys Arg Asn Gly Asp Cys Leu Tyr Pro Pro Arg Phe Ile
1               5               10              15

Ser Trp Pro Glu Val Ile Leu Ala Ser Arg Lys Gly Cys Thr Ser Ser
```

```
                20                    25                    30

His His Gln Leu Gln Arg Met Ala Ala Ile Tyr Leu Ser Arg Gly Phe
        35                    40                    45

Phe Ser Arg Glu Pro Ile Cys Pro Phe Glu Glu Lys Thr Lys Val Glu
        50                    55                    60

Arg Met Val Glu Asp Tyr Leu Ala Ser Gly Tyr Gln Val Ser Arg Lys
65                    70                    75                    80

Arg Thr Val Val Lys Asn Asp Met Leu Ser Ser Asn Arg
                85                    90
```

<210> 1527
<211> 276
<212> PRT
<213> Homo sapiens

<400> 1527

```
Phe Phe Ile Asp His Asn Thr Lys Thr Thr Thr Trp Glu Asp Pro Arg
 1               5                    10                    15

Leu Lys Phe Pro Val His Met Arg Ser Lys Thr Ser Leu Asn Pro Asn
            20                    25                    30

Asp Leu Gly Pro Leu Pro Pro Gly Trp Glu Glu Arg Ile His Leu Asp
        35                    40                    45

Gly Arg Thr Phe Tyr Ile Asp His Asn Ser Lys Ile Thr Gln Trp Glu
        50                    55                    60

Asp Pro Arg Leu Gln Asn Pro Ala Ile Thr Gly Pro Ala Val Pro Tyr
65                    70                    75                    80

Ser Arg Glu Phe Lys Gln Lys Tyr Asp Tyr Phe Arg Lys Lys Leu Lys
                85                    90                    95

Lys Pro Ala Asp Ile Pro Asn Arg Phe Glu Met Lys Leu His Arg Asn
            100                   105                   110

Asn Ile Phe Glu Glu Ser Tyr Arg Arg Ile Met Ser Val Lys Arg Pro
            115                   120                   125

Asp Val Leu Lys Ala Arg Leu Trp Ile Glu Phe Glu Ser Glu Lys Gly
        130                   135                   140

Leu Asp Tyr Gly Gly Val Ala Arg Glu Trp Phe Phe Leu Leu Ser Lys
145                   150                   155                   160
```

```
Glu Met Phe Asn Pro Tyr Tyr Gly Leu Phe Glu Tyr Ser Ala Thr Asp
            165             170             175

Asn Tyr Thr Leu Gln Ile Asn Pro Asn Ser Gly Leu Cys Asn Glu Asp
            180             185             190

His Leu Ser Tyr Phe Thr Phe Ile Gly Arg Val Ala Gly Leu Ala Val
            195             200             205

Phe His Gly Lys Leu Leu Asp Gly Phe Phe Ile Arg Pro Phe Tyr Lys
        210             215             220

Met Met Leu Gly Lys Gln Ile Thr Leu Asn Asp Met Glu Ser Val Asp
225             230             235             240

Ser Glu Tyr Tyr Asn Ser Leu Lys Trp Ile Leu Glu Asn Asp Pro Thr
            245             250             255

Glu Leu Asp Leu Met Phe Cys Ile Asp Glu Glu Asn Phe Gly Gln Thr
            260             265             270

Ser Thr Gly Arg
        275
```

```
<210> 1528
<211> 307
<212> PRT
<213> Homo sapiens

<400> 1528
Val Met Asp Leu Val Leu Arg Val Ala Asp Tyr Tyr Phe Phe Thr Pro
  1             5               10              15

Tyr Val Tyr Pro Ala Thr Trp Pro Glu Asp Asp Ile Phe Arg Gln Ala
            20              25              30

Ile Ser Leu Leu Ile Val Thr Asn Val Gly Ala Tyr Ile Leu Tyr Phe
            35              40              45

Phe Cys Ala Thr Leu Ser Tyr Tyr Phe Val Phe Asp His Ala Leu Met
        50              55              60

Lys His Pro Gln Phe Leu Lys Asn Gln Val Arg Arg Glu Ile Lys Phe
65              70              75              80

Thr Val Gln Ala Leu Pro Trp Ile Ser Ile Leu Thr Val Ala Leu Phe
            85              90              95
```

Leu Leu Glu Ile Arg Gly Tyr Ser Lys Leu His Asp Asp Leu Gly Glu
            100   105   110

Phe Pro Tyr Gly Leu Phe Glu Leu Val Val Ser Ile Ile Ser Phe Leu
            115   120   125

Phe Phe Thr Asp Met Phe Ile Tyr Trp Ile His Arg Gly Leu His His
            130   135   140

Arg Leu Val Tyr Lys Arg Leu His Lys Pro His His Ile Trp Lys Ile
145   150   155   160

Pro Thr Pro Phe Ala Ser His Ala Phe His Pro Ile Asp Gly Phe Leu
                165   170   175

Gln Ser Leu Pro Tyr His Ile Tyr Pro Phe Ile Phe Pro Leu His Lys
            180   185   190

Val Val Tyr Leu Ser Leu Tyr Ile Leu Val Asn Ile Trp Thr Ile Ser
            195   200   205

Ile His Asp Gly Asp Phe Arg Val Pro Gln Ile Leu Gln Pro Phe Ile
            210   215   220

Asn Gly Ser Ala His His Thr Asp His His Met Phe Phe Asp Tyr Asn
225   230   235   240

Tyr Gly Gln Tyr Phe Thr Leu Trp Asp Arg Ile Gly Gly Ser Phe Lys
                245   250   255

Asn Pro Ser Ser Phe Glu Gly Lys Gly Pro Leu Ser Tyr Val Lys Glu
                260   265   270

Met Thr Glu Gly Lys Arg Thr Ala Ile Gln Glu Met Ala Val Arg Met
            275   280   285

Lys Asn Tyr Ser Met Glu Ser Leu Gln Arg Leu Asn Arg Leu Leu Pro
    290   295   300

Ser Tyr Ser
305

<210> 1529
<211> 233
<212> PRT
<213> Homo sapiens

<400> 1529
Thr Pro Tyr Ala Ser Leu Pro Met Gln Thr Ile Gln Glu Asn Lys Pro

```
        1                 5                        10                        15

    Ala Thr Phe Ser Ser Met Ser His Tyr Gly Asn Gln Thr Leu Gln Asp
                20              25                  30

    Leu Leu Thr Ser Asp Ser Leu Ser His Ser Asp Val Met Met Thr Gln
                35              40                  45

    Ser Asp Pro Leu Met Ser Gln Ala Ser Thr Ala Val Ser Ala Gln Asn
        50                  55                  60

    Ser Arg Arg Asn Val Met Leu Arg Asn Asp Pro Met Met Ser Phe Ala
    65              70                  75                  80

    Ala Gln Pro Asn Gln Gly Ser Leu Val Asn Gln Asn Leu Leu His His
                85                  90                  95

    Gln His Gln Thr Gln Gly Ala Leu Gly Gly Ser Arg Ala Leu Ser Asn
                100                 105                 110

    Ser Val Ser Asn Met Gly Leu Ser Glu Ser Ser Ser Leu Gly Ser Ala
            115                 120                 125

    Lys His Gln Gln Gln Ser Pro Val Ser Gln Ser Met Gln Thr Leu Ser
            130                 135                 140

    Asp Ser Leu Ser Gly Ser Ser Leu Tyr Ser Thr Ser Ala Asn Leu Pro
    145                 150                 155                 160

    Val Met Gly His Glu Lys Phe Pro Ser Asp Leu Asp Leu Asp Met Phe
                165                 170                 175

    Asn Gly Ser Leu Glu Cys Asp Met Glu Ser Ile Ile Arg Ser Glu Leu
                180                 185                 190

    Met Asp Ala Asp Gly Leu Asp Phe Asn Phe Asp Ser Leu Ile Ser Thr
            195                 200                 205

    Gln Asn Val Val Gly Leu Asn Val Gly Asn Phe Thr Gly Ala Lys Gln
        210                 215                 220

    Ala Ser Ser Gln Ser Trp Val Pro Gly
    225                 230
```

```
<210> 1530
<211> 363
<212> PRT
<213> Homo sapiens
```

<220>
<221> SITE
<222> (178)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (179)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1530
Ala His Arg Leu Leu Val His Arg Asp Val Cys His His Val Ser Ser
 1   5   10   15

Glu Val Gln Phe Gly His Ala Gly Ala Cys Ala Asn Gln Ala Ser Glu
                20   25   30

Thr Ala Val Ala Lys Asn Gln Ala Leu Lys Glu Ala Gly Val Phe Val
            35   40   45

Pro Arg Ser Phe Asp Glu Leu Gly Glu Ile Ile Gln Ser Val Tyr Glu
        50   55   60

Asp Leu Val Ala Asn Gly Val Ile Val Pro Ala Gln Glu Val Pro Pro
65   70   75   80

Pro Thr Val Pro Met Asp Tyr Ser Trp Ala Arg Glu Leu Gly Leu Ile
                85   90   95

Arg Lys Pro Ala Ser Phe Met Thr Ser Ile Cys Asp Glu Arg Gly Gln
            100   105   110

Glu Leu Ile Tyr Ala Gly Met Pro Ile Thr Glu Val Phe Lys Glu Glu
            115   120   125

Met Gly Ile Gly Gly Val Leu Gly Leu Leu Trp Phe Gln Lys Arg Leu
    130   135   140

Pro Lys Tyr Ser Cys Gln Phe Ile Glu Met Cys Leu Met Val Thr Ala
145   150   155   160

Asp His Gly Pro Ala Val Ser Gly Ala His Asn Thr Ile Ile Cys Ala
            165   170   175

Arg Xaa Xaa Lys Asp Leu Val Ser Ser Leu Thr Ser Gly Leu Leu Thr
            180   185   190

Ile Gly Asp Arg Phe Gly Gly Ala Leu Asp Ala Ala Ala Lys Met Phe
            195   200   205

Ser Lys Ala Phe Asp Ser Gly Ile Ile Pro Met Glu Phe Val Asn Lys

```
            210                  215                  220

    Met Lys Lys Glu Gly Lys Leu Ile Met Gly Ile Gly His Arg Val Lys
    225               230               235               240

    Ser Ile Asn Asn Pro Asp Met Arg Val Gln Ile Leu Lys Asp Tyr Val
                    245               250               255

    Arg Gln His Phe Pro Ala Thr Pro Leu Leu Asp Tyr Ala Leu Glu Val
                    260               265               270

    Glu Lys Ile Thr Thr Ser Lys Lys Pro Asn Leu Ile Leu Asn Val Asp
                    275               280               285

    Gly Leu Ile Gly Val Ala Phe Val Asp Met Leu Arg Asn Cys Gly Ser
        290               295               300

    Phe Thr Arg Glu Glu Ala Asp Glu Tyr Ile Asp Ile Gly Ala Leu Asn
    305               310               315               320

    Gly Ile Phe Val Leu Gly Arg Ser Met Gly Phe Ile Gly His Tyr Leu
                    325               330               335

    Asp Gln Lys Arg Leu Lys Gln Gly Leu Tyr Arg His Pro Trp Asp Asp
                    340               345               350

    Ile Ser Tyr Val Leu Pro Glu His Met Ser Met
                    355               360
```

<210> 1531
<211> 397
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (179)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (180)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (181)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (358)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1531
Ser Val Ser Ala Ser Glu Val Thr Ser Thr Val Tyr Asn Thr Val Ser
 1   5   10   15

Glu Gly Thr His Phe Leu Glu Thr Ile Glu Thr Pro Arg Pro Gly Lys
            20   25   30

Leu Phe Pro Lys Asp Val Ser Ser Ser Thr Pro Pro Ser Val Thr Ser
        35   40   45

Lys Ser Arg Val Ser Arg Leu Ala Gly Arg Lys Thr Asn Glu Ser Val
    50   55   60

Ser Glu Pro Arg Lys Gly Phe Met Tyr Ser Arg Asn Thr Asn Glu Asn
65   70   75   80

Pro Gln Glu Cys Phe Asn Ala Ser Lys Leu Leu Thr Ser His Gly Met
                85   90   95

Gly Ile Gln Val Pro Leu Asn Ala Thr Glu Phe Asn Tyr Leu Cys Pro
            100   105   110

Ala Ile Ile Asn Gln Ile Asp Ala Arg Ser Cys Leu Ile His Thr Ser
            115   120   125

Glu Lys Lys Ala Glu Ile Pro Pro Lys Thr Tyr Ser Leu Gln Ile Ala
    130   135   140

Trp Val Gly Gly Phe Ile Ala Ile Ser Ile Ile Ser Phe Leu Ser Leu
145   150   155   160

Leu Gly Val Ile Leu Val Pro Leu Met Asn Arg Val Phe Phe Lys Phe
                165   170   175

Leu Leu Xaa Xaa Xaa Val Ala Leu Ala Val Gly Thr Leu Ser Gly Asp
            180   185   190

Ala Phe Leu His Leu Leu Pro His Ser His Ala Ser His His His Ser
        195   200   205

His Ser His Glu Glu Pro Ala Met Glu Met Lys Arg Gly Pro Leu Phe
    210   215   220

Ser His Leu Ser Ser Gln Asn Ile Glu Glu Ser Ala Tyr Phe Asp Ser
225   230   235   240

```
Thr Trp Lys Gly Leu Thr Ala Leu Gly Gly Leu Tyr Phe Met Phe Leu
            245             250             255

Val Glu His Val Leu Thr Leu Ile Lys Gln Phe Lys Asp Lys Lys Lys
            260             265             270

Lys Asn Gln Lys Lys Pro Glu Asn Asp Asp Asp Val Glu Ile Lys Lys
            275             280             285

Gln Leu Ser Lys Tyr Glu Ser Gln Leu Ser Thr Asn Glu Glu Lys Val
    290             295             300

Asp Thr Asp Asp Arg Thr Glu Gly Tyr Leu Arg Ala Asp Ser Gln Glu
305             310             315             320

Pro Ser His Phe Asp Ser Gln Gln Pro Ala Val Leu Glu Glu Glu Glu
            325             330             335

Val Met Ile Ala His Ala His Pro Gln Glu Val Tyr Asn Glu Tyr Val
            340             345             350

Pro Arg Gly Cys Lys Xaa Lys Cys His Ser His Phe His Asp Thr Leu
            355             360             365

Gly Gln Ser Asp Asp Leu Ile His His His His Asp Phe Phe Lys Lys
    370             375             380

Lys Lys Lys Lys Lys Lys Ile Lys Lys Lys Gln Lys Lys
385             390             395


<210> 1532
<211> 130
<212> PRT
<213> Homo sapiens

<400> 1532
Val Trp His Phe Ile Leu Phe Leu Cys Cys Trp Leu Cys Ile Leu Glu
  1             5               10              15

Gly Lys Lys Leu Leu Lys Gln Thr Ser Gln Phe Phe Phe Leu Phe Ser
            20              25              30

Asn Tyr Pro Val Gly Asn Ser Gln Tyr Gly Gln Gln Gln Asp Ala Tyr
            35              40              45

Gln Gly Pro Pro Pro Gln Gln Gly Tyr Pro Pro Gln Gln Gln Gln Tyr
    50              55              60

Pro Gly Gln Gln Gly Tyr Pro Gly Gln Gln Gln Gly Tyr Gly Pro Ser
```

```
            65                       70                       75                       80

        Gln Gly Gly Pro Gly Pro Gln Tyr Pro Asn Tyr Pro Gln Gly Gln Gly
                        85                       90                       95

        Gln Gln Tyr Gly Gly Tyr Arg Pro Thr Gln Pro Gly Pro Pro Gln Pro
                        100                      105                      110

        Pro Gln Gln Arg Pro Tyr Gly Tyr Asp Gln Gly Gln Tyr Gly Asn Tyr
                        115                      120                      125

        Gln Gln
            130
```

```
<210> 1533
<211> 53
<212> PRT
<213> Homo sapiens

<400> 1533
Ala Ile Leu Asp Leu Tyr Asn Pro Leu Asp Ala Ser Ala Tyr Arg Phe
 1               5                   10                  15

Lys Met His Pro Val Val Phe Val Ala Phe Ser Ile Leu Ser Phe Leu
                20                  25                  30

Met Cys Pro Ile Asn Lys Gln Phe Tyr Leu Lys Phe Lys Lys Lys Lys
                35                  40                  45

Lys Lys Lys Lys Arg
            50
```

```
<210> 1534
<211> 93
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (81)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<400> 1534
Gly Ala Ser Ala Arg Pro Pro Glu Arg Gly Pro His Pro Xaa Ala Ala
 1   5   10   15

Arg Asp Pro Arg Gly Pro Pro Leu Pro Leu Ser Phe Ser Ser Ala Pro
            20   25   30

Thr Asp Thr Phe His Ser Glu Val Ser Pro Ser Pro Leu Leu Lys Ser
        35   40   45

Pro Arg Ser Pro Leu His Pro Glu Val Ser Leu Tyr Arg Asp Pro Pro
    50   55   60

Ser Phe His Pro Glu Asp Arg Pro Asn Pro Arg Ser Pro Pro Leu Ser
65   70   75   80

Xaa Ser Glu Arg Ala Ser Phe Gly Pro Lys Gln Pro Gly
            85   90

<210> 1535
<211> 150
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (75)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (83)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (106)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1535
Pro Glu Ser Leu Gly Gly Ser Pro Gly Pro Pro Arg Pro Arg Gln Ser
 1   5   10   15

Cys Ser Glu Thr Ser Val Val Leu Lys Cys His Ser Pro Arg Pro Gly
            20   25   30

Arg His Arg Ser Pro Glu Ser Trp Ala Leu Gly Thr Leu Glu Ala Ala
        35   40   45

```
Ala Pro Gly Thr Arg Gly Arg Pro Gly Ala Gly Glu Leu Arg Cys Trp
    50              55              60
```

```
Glu Arg Ala Val Phe Ala Asp Ser Gly Gly Xaa Gly Gly Ser Arg Pro
65              70              75              80
```

```
Gly Ser Xaa Pro Gly Met Thr Met Leu Met Glu Leu Met Gly Gln Glu
            85              90              95
```

```
Trp Glu Arg Arg Ser Ala Ala Phe Cys Xaa Cys Ala Ser Ile Ala Lys
        100             105             110
```

```
Phe His Ser Pro Ser Ser Ala Ala Leu Leu Leu Ala Cys Gly Ser Pro
        115             120             125
```

```
Arg Tyr Asn Phe Trp Ser Cys Leu Phe Leu Leu Met Ser Phe Thr Val
    130             135             140
```

```
Asn Lys Phe Asp Cys His
145             150
```

```
<210> 1536
<211> 74
<212> PRT
<213> Homo sapiens
```

```
<400> 1536
Leu Thr Tyr Ser Lys Asn Ala Pro Ile Leu Ser Asn Ser Met Pro Phe
1               5               10              15
```

```
Asp Lys Cys Ser Val Pro Met Pro Arg Pro Pro Gln Ser Arg Glu Asn
            20              25              30
```

```
Ile Phe Ile Thr Pro Glu Gly Leu Leu Cys Ser Glu Tyr Ser Leu Gly
            35              40              45
```

```
Val Pro Ala Ala Gly Asp Ile Asp Leu Phe Ser Val Thr Val Asp Glu
    50              55              60
```

```
Ile Cys Leu Leu Tyr Thr Ile Phe Lys Asn
65              70
```

```
<210> 1537
<211> 224
<212> PRT
<213> Homo sapiens
```

```
<400> 1537
Gly Thr Ser Arg Pro Val Ala Pro Glu Cys Thr Glu Asp Gly Gly Cys
 1               5                  10                  15

Cys Arg Thr Val Ala Pro Ser Val Gly Ser Ser Cys His Ala Pro Ala
                20                  25                  30

Val Thr Gln His Ala Pro Tyr Phe Lys Gly Thr Ala Val Val Asn Gly
            35                  40                  45

Glu Phe Lys Asp Leu Ser Leu Asp Asp Phe Lys Gly Lys Tyr Leu Val
        50                  55                  60

Leu Phe Phe Tyr Pro Leu Asp Phe Thr Phe Val Cys Pro Thr Glu Ile
 65                  70                  75                  80

Val Ala Phe Ser Asp Lys Ala Asn Glu Phe His Asp Val Asn Cys Glu
                85                  90                  95

Val Val Ala Val Ser Val Asp Ser His Phe Ser His Leu Ala Trp Ile
            100                 105                 110

Asn Thr Pro Arg Lys Asn Gly Gly Leu Gly His Met Asn Ile Ala Leu
        115                 120                 125

Leu Ser Asp Leu Thr Lys Gln Ile Ser Arg Asp Tyr Gly Val Leu Leu
        130                 135                 140

Glu Gly Ser Gly Leu Ala Leu Arg Gly Leu Phe Ile Ile Asp Pro Asn
·145                 150                 155                 160

Gly Val Ile Lys His Leu Ser Val Asn Asp Leu Pro Val Gly Arg Ser
                165                 170                 175

Val Glu Glu Thr Leu Arg Leu Val Lys Ala Phe Gln Tyr Val Glu Thr
            180                 185                 190

His Gly Glu Val Cys Pro Ala Asn Trp Thr Pro Asp Ser Pro Thr Ile
            195                 200                 205

Lys Pro Ser Pro Ala Ala Ser Lys Glu Tyr Phe Gln Lys Val Asn Gln
    210                 215                 220
```

```
<210> 1538
<211> 524
<212> PRT
```

<213> Homo sapiens

<400> 1538

```
Ser Ile Met Asn Ile Asn Asp Leu Lys Leu Thr Leu Ser Lys Ala Gly
 1               5                  10                  15

Gln Glu His Leu Leu Arg Phe Trp Asn Glu Leu Glu Glu Ala Gln Gln
             20                  25                  30

Val Glu Leu Tyr Ala Glu Leu Gln Ala Met Asn Phe Glu Glu Leu Asn
             35                  40                  45

Phe Phe Phe Gln Lys Ala Ile Glu Gly Phe Asn Gln Ser Ser His Gln
         50                  55                  60

Lys Asn Val Asp Ala Arg Met Glu Pro Val Pro Arg Glu Val Leu Gly
 65                  70                  75                  80

Ser Ala Thr Arg Asp Gln Asp Gln Leu Gln Ala Trp Glu Ser Glu Gly
                 85                  90                  95

Leu Phe Gln Ile Ser Gln Asn Lys Val Ala Val Leu Leu Leu Ala Gly
                100                 105                 110

Gly Gln Gly Thr Arg Leu Gly Val Ala Tyr Pro Lys Gly Met Tyr Asp
             115                 120                 125

Val Gly Leu Pro Ser Arg Lys Thr Leu Phe Gln Ile Gln Ala Glu Arg
         130                 135                 140

Ile Leu Lys Leu Gln Gln Val Ala Glu Lys Tyr Tyr Gly Asn Lys Cys
145                 150                 155                 160

Ile Ile Pro Trp Tyr Ile Met Thr Ser Gly Arg Thr Met Glu Ser Thr
                165                 170                 175

Lys Glu Phe Phe Thr Lys His Lys Tyr Phe Gly Leu Lys Lys Glu Asn
             180                 185                 190

Val Ile Phe Phe Gln Gln Gly Met Leu Pro Ala Met Ser Phe Asp Gly
             195                 200                 205

Lys Ile Ile Leu Glu Glu Lys Asn Lys Val Ser Met Ala Pro Asp Gly
         210                 215                 220

Asn Gly Gly Leu Tyr Arg Ala Leu Ala Ala Gln Asn Ile Val Glu Asp
225                 230                 235                 240

Met Glu Gln Arg Gly Ile Trp Ser Ile His Val Tyr Cys Val Asp Asn
                245                 250                 255
```

```
Ile Leu Val Lys Val Ala Asp Pro Arg Phe Ile Gly Phe Cys Ile Gln
            260             265             270

Lys Gly Ala Asp Cys Gly Ala Lys Val Val Glu Lys Thr Asn Pro Thr
        275             280             285

Glu Pro Val Gly Val Val Cys Arg Val Asp Gly Val Tyr Gln Val Val
        290             295             300

Glu Tyr Ser Glu Ile Ser Leu Ala Thr Ala Gln Lys Arg Ser Ser Asp
305             310             315             320

Gly Arg Leu Leu Phe Asn Ala Gly Asn Ile Ala Asn His Phe Phe Thr
            325             330             335

Val Pro Phe Leu Arg Asp Val Val Asn Val Tyr Glu Pro Gln Leu Gln
            340             345             350

His His Val Ala Gln Lys Lys Ile Pro Tyr Val Asp Thr Gln Gly Gln
            355             360             365

Leu Ile Lys Pro Asp Lys Pro Asn Gly Ile Lys Met Glu Lys Phe Val
    370             375             380

Phe Asp Ile Phe Gln Phe Ala Lys Lys Phe Val Val Tyr Glu Val Leu
385             390             395             400

Arg Glu Asp Glu Phe Ser Pro Leu Lys Asn Ala Asp Ser Gln Asn Gly
                405             410             415

Lys Asp Asn Pro Thr Thr Ala Arg His Ala Leu Met Ser Leu His His
            420             425             430

Cys Trp Val Leu Asn Ala Gly Gly His Phe Ile Asp Glu Asn Gly Ser
        435             440             445

Arg Leu Pro Ala Ile Pro Arg Ser Ala Thr Asn Gly Lys Ser Glu Thr
    450             455             460

Ile Thr Ala Asp Val Asn His Asn Leu Lys Asp Ala Asn Asp Val Pro
465             470             475             480

Ile Gln Cys Glu Ile Ser Pro Leu Ile Ser Tyr Ala Gly Glu Gly Leu
            485             490             495

Glu Ser Tyr Val Ala Asp Lys Glu Phe His Ala Pro Leu Ile Ile Asp
            500             505             510

Glu Asn Gly Val His Glu Leu Val Lys Asn Gly Ile
            515             520
```

```
<210> 1539
<211> 336
<212> PRT
<213> Homo sapiens

<400> 1539
His Phe Ile Phe Leu Leu Lys Asn Phe Gln Gln Ser Ser Asn Asp Thr
 1               5                   10                  15

Phe Pro Thr Ala Met His Ile Ala Ala Ala Ile Glu Val His Glu Val
                20                  25                  30

Leu Leu Pro Gly Leu Gln Lys Leu His Asp Ala Leu Asp Ala Lys Ser
            35                  40                  45

Lys Glu Phe Ala Gln Ile Ile Lys Ile Gly Arg Thr His Thr Gln Asp
        50                  55                  60

Ala Val Pro Leu Thr Leu Gly Gln Glu Phe Ser Gly Tyr Val Gln Gln
65                  70                  75                  80

Val Lys Tyr Ala Met Thr Arg Ile Lys Ala Ala Met Pro Arg Ile Tyr
                85                  90                  95

Glu Leu Ala Ala Gly Gly Thr Ala Val Gly Thr Gly Leu Asn Thr Arg
                100                 105                 110

Ile Gly Phe Ala Glu Lys Val Ala Ala Lys Val Ala Ala Leu Thr Gly
            115                 120                 125

Leu Pro Phe Val Thr Ala Pro Asn Lys Phe Glu Ala Leu Ala Ala His
            130                 135                 140

Asp Ala Leu Val Glu Leu Ser Gly Ala Met Asn Thr Thr Ala Cys Ser
145                 150                 155                 160

Leu Met Lys Ile Ala Asn Asp Ile Arg Phe Leu Gly Ser Gly Pro Arg
                165                 170                 175

Ser Gly Leu Gly Glu Leu Ile Leu Pro Glu Asn Glu Pro Gly Ser Ser
                180                 185                 190

Ile Met Pro Gly Lys Val Asn Pro Thr Gln Cys Glu Ala Met Thr Met
            195                 200                 205

Val Ala Ala Gln Val Met Gly Asn His Val Ala Val Thr Val Gly Gly
        210                 215                 220

Ser Asn Gly His Phe Glu Leu Asn Val Phe Lys Pro Met Met Ile Lys
```

```
         225                    230                    235                    240

    Asn Val Leu His Ser Ala Arg Leu Leu Gly Asp Ala Ser Val Ser Phe
                    245                    250                    255

    Thr Glu Asn Cys Val Val Gly Ile Gln Ala Asn Thr Glu Arg Ile Asn
                    260                    265                    270

    Lys Leu Met Asn Glu Ser Leu Met Leu Val Thr Ala Leu Asn Pro His
                    275                    280                    285

    Ile Gly Tyr Asp Lys Ala Ala Lys Ile Ala Lys Thr Ala His Lys Asn
        290                    295                    300

    Gly Ser Thr Leu Lys Glu Thr Ala Ile Glu Leu Gly Tyr Leu Thr Ala
    305                    310                    315                    320

    Glu Gln Phe Asp Glu Trp Val Lys Pro Lys Asp Met Leu Gly Pro Lys
                    325                    330                    335
```

```
<210> 1540
<211> 126
<212> PRT
<213> Homo sapiens

<400> 1540
    Gly Val Val Lys Ser Leu Leu Phe Thr Arg Cys Asn Val Leu Val Pro
      1               5                    10                    15

    Tyr Lys Gln Gly Trp Gly Gly Glu Gly Arg Ala Lys Thr Asn Ile Glu
                    20                    25                    30

    Ile Leu Lys Gln Gln Gln Ser Glu Trp Ile Leu Phe Phe Val Ile Val
                    35                    40                    45

    Gly Gly Leu Lys Asn Ser Pro His Val Ile Ile Val Asn Thr Leu Leu
        50                    55                    60

    Cys Gly His Cys Asn Ile Trp Gly Val Gly Gln Gly Gly Lys Val Thr
    65                    70                    75                    80

    Ile Val His Met Ser Leu Ala Ser Val Gln Ser Ser Val Gln Asn Val
                    85                    90                    95

    Met Leu Phe Cys Lys Lys Arg Phe Met Ile Phe Lys Ile Asn Leu Val
                    100                   105                   110
```

```
Asn Leu Phe Leu Val Val Ile Phe Phe Leu Arg Gln Ser Phe
        115                 120                 125
```

<210> 1541
<211> 50
<212> PRT
<213> Homo sapiens

<400> 1541

```
Asn Ser Ala Arg Val Cys Ile Leu Ser Arg Asp Arg Val Ser Pro Cys
 1               5               10                  15

Trp Leu Gly Trp Cys Leu Ser Leu Asp Leu Val Ile His Pro Pro Gln
            20                  25                  30

Pro Pro Arg Val Leu Gly Leu Gln Val Arg Ala Thr Ala Pro Gly Trp
            35                  40                  45

Phe Ser
    50
```

<210> 1542
<211> 45
<212> PRT
<213> Homo sapiens

<400> 1542

```
Asp Phe Phe Leu Asn Ile Ser Glu Phe Glu Gly Asn Thr Asp Arg Phe
 1               5               10                  15

Leu Pro Ser Ser Leu Pro Ile Thr His Leu Ser Asp Asn Thr Leu Leu
            20                  25                  30

Ile Glu Glu Val Ile Arg Ile Ile Phe Lys Phe Gln Ile
            35                  40                  45
```

<210> 1543
<211> 239
<212> PRT
<213> Homo sapiens

<400> 1543

```
Ile Ala Leu Pro Pro Ser Phe Gln Pro Gln Ser Asp Gly Arg Gly Asp
 1               5               10                  15
```

```
Ala Ser Gly Arg Asn Ala Ala Met Ala Ala Gln Gly Glu Pro Gln Val
            20                  25                  30

Gln Phe Lys Leu Val Leu Val Gly Asp Gly Gly Thr Gly Lys Thr Thr
            35                  40                  45

Phe Val Lys Arg His Leu Thr Gly Glu Phe Glu Lys Lys Tyr Val Ala
        50                  55                  60

Thr Leu Gly Val Glu Val His Pro Leu Val Phe His Thr Asn Arg Gly
65                  70                  75                  80

Pro Ile Lys Phe Asn Val Trp Asp Thr Ala Gly Gln Glu Lys Phe Gly
                85                  90                  95

Gly Leu Arg Asp Gly Tyr Tyr Ile Gln Ala Gln Cys Ala Ile Ile Met
            100                 105                 110

Phe Asp Val Thr Ser Arg Val Thr Tyr Lys Asn Val Pro Asn Trp His
        115                 120                 125

Arg Asp Leu Val Arg Val Cys Glu Asn Ile Pro Ile Val Leu Cys Gly
    130                 135                 140

Asn Lys Val Asp Ile Lys Asp Arg Lys Val Lys Ala Lys Ser Ile Val
145                 150                 155                 160

Phe His Arg Lys Lys Asn Leu Gln Tyr Tyr Asp Ile Ser Ala Lys Ser
            165                 170                 175

Asn Tyr Asn Phe Glu Lys Pro Phe Leu Trp Leu Ala Arg Lys Leu Ile
            180                 185                 190

Gly Asp Pro Asn Leu Glu Phe Val Ala Met Pro Ala Leu Ala Pro Pro
        195                 200                 205

Glu Val Val Met Asp Pro Ala Leu Ala Ala Gln Tyr Glu His Asp Leu
    210                 215                 220

Glu Val Ala Gln Thr Thr Ala Leu Pro Asp Glu Asp Asp Leu
225                 230                 235
```

<210> 1544
<211> 109
<212> PRT
<213> Homo sapiens

<400> 1544

```
Val Val Thr Gly Ser Gly Ser Trp His Gln Val Ala Ser Ile Ile Arg
 1               5                  10                  15

Ser Leu Thr Glu Asp Asn Met Gln Asn Ser His Met Asp Glu Tyr Arg
            20              25              30

Asn Ser Ser Asn Gly Ser Thr Gly Asn Ser Ser Glu Val Val Val Glu
            35              40              45

His Pro Thr Asp Phe Ser Thr Glu Ile Met Asn Val Thr Glu Met Glu
        50              55              60

Gln Ser Pro Asp Asp Ser Pro Asn Val Asn Ala Ser Thr Glu Glu Thr
65              70              75              80

Glu Met Ala Ser Ala Val Asp Leu Pro Val Thr Leu Thr Glu Thr Glu
            85              90              95

Ala Ile Ser Leu Gln Asn Met Lys Asn Phe Gly Lys Leu
            100             105


<210> 1545
<211> 199
<212> PRT
<213> Homo sapiens

<400> 1545
Thr His Ala Ser Gly Pro Thr Arg Pro Gly Lys Met Ala Leu Ala Met
 1               5                  10                  15

Leu Val Leu Val Val Ser Pro Trp Ser Ala Ala Arg Gly Val Leu Arg
            20              25              30

Asn Tyr Trp Glu Arg Leu Leu Arg Lys Leu Pro Gln Ser Arg Pro Gly
        35              40              45

Phe Pro Ser Pro Pro Trp Gly Pro Ala Leu Ala Val Gln Gly Pro Ala
    50              55              60

Met Phe Thr Glu Pro Ala Asn Asp Thr Ser Gly Ser Lys Glu Asn Ser
65              70              75              80

Ser Leu Leu Asp Ser Ile Phe Trp Met Ala Ala Pro Lys Asn Arg Arg
            85              90              95

Thr Ile Glu Val Asn Arg Cys Arg Arg Asn Pro Gln Lys Leu Ile
            100             105             110

Lys Val Lys Asn Asn Ile Asp Val Cys Pro Glu Cys Gly His Leu Lys
```

```
              115                  120                  125
Gln Lys His Val Leu Cys Ala Tyr Cys Tyr Glu Lys Val Cys Lys Glu
    130                  135                  140

Thr Ala Glu Ile Arg Arg Gln Ile Gly Lys Gln Glu Gly Gly Pro Phe
145                  150                  155                  160

Lys Ala Pro Thr Ile Glu Thr Val Val Leu Tyr Thr Gly Glu Thr Pro
                 165                  170                  175

Ser Glu Gln Asp Gln Gly Lys Arg Ile Ile Glu Arg Asp Arg Lys Arg
             180                  185                  190

Pro Ser Trp Phe Thr Gln Asn
         195
```

```
<210> 1546
<211> 163
<212> PRT
<213> Homo sapiens

<400> 1546
Pro Thr Arg Pro Pro Thr Arg Pro Arg Arg Trp Arg Arg Arg Thr Ala
   1               5                  10                  15

Pro Glu Arg Ala Gly Ala Met Ser Ala Ala Arg Pro Gln Phe Ser Ile
                 20                  25                  30

Asp Asp Ala Phe Glu Leu Ser Leu Glu Asp Gly Gly Pro Gly Pro Glu
             35                  40                  45

Ser Ser Gly Val Ala Arg Phe Gly Pro Leu His Phe Glu Arg Arg Ala
         50                  55                  60

Arg Phe Glu Val Ala Asp Glu Asp Lys Gln Ser Arg Leu Arg Tyr Gln
65                  70                  75                  80

Asn Leu Glu Asn Asp Glu Asp Gly Ala Gln Ala Ser Pro Glu Pro Asp
                 85                  90                  95

Gly Gly Val Gly Thr Arg Leu Gly Pro Gly Ile Pro Ala Glu Leu Pro
                 100                 105                 110

Pro Gly Leu Pro Val Leu Leu Pro Ala Leu Leu Arg Glu Val Ile Ala
             115                 120                 125

Ala Gln Arg Gly Pro Leu Ala Pro Met Gly Ala Pro Leu Leu Pro Cys
    130                 135                 140
```

```
Ser Val Pro Leu Ile Ser Arg Glu Glu Ala Leu Gln Asp Pro Arg Asn
145             150             155             160

Pro Ser Pro


<210> 1547
<211> 176
<212> PRT
<213> Homo sapiens

<400> 1547
Ser Thr His Ala Ser Ala His Ala Ser Gly Pro Val Pro Ser Ala Ala
 1               5               10              15

Ser Ser Ala Gly Gly Ser Gly Gly Leu Ser Phe Arg Ala Ala Ser Ser
            20              25              30

Leu Pro Val Ser Pro Ser Leu Ala Val Ser Met Lys Ala Phe Ser Pro
            35              40              45

Val Arg Ser Val Arg Lys Asn Ser Leu Ser Asp His Ser Leu Gly Ile
        50              55              60

Ser Arg Ser Lys Thr Pro Val Asp Asp Pro Met Ser Leu Leu Tyr Asn
65              70              75              80

Met Asn Asp Cys Tyr Ser Lys Leu Lys Glu Leu Val Pro Ser Ile Pro
                85              90              95

Gln Asn Lys Lys Val Ser Lys Met Glu Ile Leu Gln His Val Ile Asp
                100             105             110

Tyr Ile Leu Asp Leu Gln Ile Ala Leu Asp Ser His Pro Thr Ile Val
        115             120             125

Ser Leu His His Gln Arg Pro Gly Gln Asn Gln Ala Ser Arg Thr Pro
        130             135             140

Leu Thr Thr Leu Asn Thr Asp Ile Ser Ile Leu Ser Leu Gln Ala Ser
145             150             155             160

Glu Phe Pro Ser Glu Leu Met Ser Asn Asp Ser Lys Ala Leu Cys Gly
                165             170             175
```

```
<210> 1548
<211> 69
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1548
Lys Lys Ser Leu Arg Cys Glu Tyr Arg Ile Asp Ile Glu Arg Leu Tyr
 1               5                  10                  15

Met Ser Lys Thr His Leu Ser Ser Ser His Arg Pro Leu Gln Ser Gly
            20                  25                  30

His Val Gly Gln Xaa Gly Thr Gly Ala Gly Asp Ala Pro Pro Gly Gln
            35                  40                  45

Asn Ala Pro Phe Val Ala Leu Pro Asp Thr Xaa Tyr Leu Leu Xaa Lys
        50                  55                  60

Arg Glu Thr Gly Ser
 65
```

```
<210> 1549
<211> 41
<212> PRT
<213> Homo sapiens

<400> 1549
Ile Leu Leu Tyr Lys His Phe His Ile Leu Pro Leu His Leu Thr Ile
 1               5                  10                  15

Gln His Lys Gln Leu Leu Met Ala Leu Arg Ile Val Cys Thr Cys Asn
            20                  25                  30
```

```
Phe Glu Trp Leu Tyr Ala Val Ser Ser
         35                  40
```

<210> 1550
<211> 61
<212> PRT
<213> Homo sapiens

<400> 1550
```
Phe Phe Ala Pro Leu Lys Pro Val Arg Ile Thr Met Glu Tyr Ser Ser
 1               5                  10                  15

Ser Gly Lys Ala Thr Gly Glu Ala Asp Val His Phe Glu Thr His Glu
                20                  25                  30

Asp Ala Val Ala Ala Met Leu Lys Asp Arg Ser His Val His His Arg
            35                  40                  45

Tyr Ile Glu Leu Phe Leu Asn Ser Cys Pro Lys Gly Lys
    50                  55                  60
```

<210> 1551
<211> 114
<212> PRT
<213> Homo sapiens

<400> 1551
```
Gly Ser Leu Ala Ser Phe Leu Ala Cys Ser Ser Glu Phe Phe Gln Pro
 1               5                  10                  15

Pro Pro Thr Ala Gln Phe Gln Ser His Phe Ser Thr Phe Arg Tyr Leu
                20                  25                  30

Leu Gln Gln His Leu Lys Tyr Leu Glu Asn Ser Phe Met Pro Ala Ser
            35                  40                  45

Leu Pro Asp Asp Leu Asn Met Val Leu Asp Leu Glu Phe Thr Phe Leu
    50                  55                  60

Gln Gly His Cys Leu Phe Gln Arg Gly Glu Phe Thr Cys Ala Arg Val
 65                  70                  75                  80

Phe Thr Leu Gly Val Leu Pro Glu Leu Pro Gln Asp Glu Ser Gly Glu
                85                  90                  95

Pro Thr Thr Ala Glu Lys Phe Ser Gln Cys Arg Asn Ile Glu Glu Phe
```

```
                    100                 105                 110


Ser Lys



<210> 1552
<211> 450
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (185)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (200)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (414)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (420)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (429)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (442)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1552
Thr Gly Cys Gly Lys Thr Thr Gln Val Thr Gln Phe Ile Leu Asp Asn
 1               5                  10                  15


Tyr Ile Glu Arg Gly Lys Gly Ser Ala Cys Arg Ile Val Cys Thr Gln
                20              25              30


Pro Arg Arg Ile Ser Ala Ile Ser Val Ala Glu Arg Val Ala Ala Glu
          35              40              45
```

```
Arg Ala Glu Ser Cys Gly Ser Gly Asn Ser Thr Gly Tyr Gln Ile Arg
    50              55              60

Leu Gln Ser Arg Leu Pro Arg Lys Gln Gly Ser Ile Leu Tyr Cys Thr
65              70              75              80

Thr Gly Ile Ile Leu Gln Trp Leu Gln Ser Asp Pro Tyr Leu Ser Ser
            85              90              95

Val Ser His Ile Val Leu Asp Glu Ile His Glu Arg Asn Leu Gln Ser
            100             105             110

Asp Val Leu Met Thr Val Val Lys Asp Leu Leu Asn Phe Arg Ser Asp
            115             120             125

Leu Lys Val Ile Leu Met Ser Ala Thr Leu Asn Ala Glu Lys Phe Ser
    130             135             140

Glu Tyr Phe Gly Asn Cys Pro Met Ile His Ile Pro Gly Phe Thr Phe
145             150             155             160

Pro Val Val Glu Tyr Leu Leu Glu Asp Val Ile Glu Lys Ile Arg Tyr
            165             170             175

Val Pro Glu Gln Lys Glu His Arg Xaa Gln Phe Lys Arg Gly Phe Met
            180             185             190

Gln Gly His Val Asn Arg Gln Xaa Lys Glu Glu Lys Glu Ala Ile Tyr
    195             200             205

Lys Glu Arg Trp Pro Asp Tyr Val Arg Glu Leu Arg Arg Arg Tyr Ser
210             215             220

Ala Ser Thr Val Asp Val Ile Glu Met Met Glu Asp Asp Lys Val Asp
225             230             235             240

Leu Asn Leu Ile Val Ala Leu Ile Arg Tyr Ile Val Leu Glu Glu Glu
            245             250             255

Asp Gly Ala Ile Leu Val Phe Leu Pro Gly Trp Asp Asn Ile Ser Thr
            260             265             270

Leu His Asp Leu Leu Met Ser Gln Val Met Phe Lys Ser Asp Lys Phe
    275             280             285

Leu Ile Ile Pro Leu His Ser Leu Met Pro Thr Val Asn Gln Thr Gln
    290             295             300

Val Phe Lys Arg Thr Pro Pro Gly Val Arg Lys Ile Val Ile Ala Thr
305             310             315             320
```

```
Asn Ile Ala Glu Thr Ser Ile Thr Ile Asp Asp Val Val Tyr Val Ile
            325             330             335

Asp Gly Gly Lys Ile Lys Glu Thr His Phe Asp Thr Gln Asn Asn Ile
            340             345             350

Ser Thr Met Ser Ala Glu Trp Val Ser Lys Ala Asn Ala Lys Gln Arg
            355             360             365

Lys Gly Arg Ala Gly Arg Val Gln Pro Gly His Cys Tyr His Leu Tyr
    370             375             380

Asn Gly Leu Arg Ala Ser Leu Leu Asp Asp Tyr Gln Leu Pro Glu Ile
385             390             395             400

Leu Arg Thr Pro Leu Glu Glu Leu Cys Leu Gln Ile Lys Xaa Phe Lys
            405             410             415

Ala Arg Trp Xaa Cys Leu Phe Leu Ser Arg Leu Met Xaa Pro Pro Ser
            420             425             430

Asn Glu Ala Val Leu Leu Ser Ile Arg Xaa Leu Met Glu Leu Glu Arg
            435             440             445

Phe Gly
    450
```

```
<210> 1553
<211> 446
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (61)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (99)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1553
```

```
Glu Leu Leu Ala Val Val Gly Pro Val Gly Ala Gly Lys Ser Ser Leu
 1               5                   10                  15

Leu Ser Ala Val Leu Gly Glu Leu Ala Pro Ser His Gly Leu Val Ser
             20                  25                  30

Val His Gly Arg Ile Ala Tyr Val Ser Gln Gln Pro Trp Val Phe Ser
             35                  40                  45

Gly Thr Leu Arg Ser Asn Ile Leu Phe Gly Lys Lys Xaa Glu Lys Xaa
         50                  55                  60

Arg Tyr Glu Lys Val Ile Lys Ala Cys Ala Leu Lys Lys Asp Leu Gln
65               70                  75                  80

Leu Leu Glu Asp Gly Asp Leu Thr Val Ile Gly Asp Arg Gly Thr Thr
             85                  90                  95

Leu Ser Xaa Gly Gln Lys Ala Arg Val Asn Leu Ala Arg Ala Val Tyr
             100                 105                 110

Gln Asp Ala Asp Ile Tyr Leu Leu Asp Asp Pro Leu Ser Ala Val Asp
         115                 120                 125

Ala Glu Val Ser Arg His Leu Phe Glu Leu Cys Ile Cys Gln Ile Leu
         130                 135                 140

His Glu Lys Ile Thr Ile Leu Val Thr His Gln Leu Gln Tyr Leu Lys
145                 150                 155                 160

Ala Ala Ser Gln Ile Leu Ile Leu Lys Asp Gly Lys Met Val Gln Lys
             165                 170                 175

Gly Thr Tyr Thr Glu Phe Leu Lys Ser Gly Ile Asp Phe Gly Ser Leu
             180                 185                 190

Leu Lys Lys Asp Asn Glu Glu Ser Glu Gln Pro Pro Val Pro Gly Thr
         195                 200                 205

Pro Thr Leu Arg Asn Arg Thr Phe Ser Glu Ser Ser Val Trp Ser Gln
210                 215                 220

Gln Ser Ser Arg Pro Ser Leu Lys Asp Gly Ala Leu Glu Ser Gln Asp
225                 230                 235                 240

Thr Glu Asn Val Pro Val Thr Leu Ser Glu Glu Asn Arg Ser Glu Gly
             245                 250                 255

Lys Val Gly Phe Gln Ala Tyr Lys Asn Tyr Phe Arg Ala Gly Ala His
             260                 265                 270
```

```
Trp Ile Val Phe Ile Phe Leu Ile Leu Leu Asn Thr Ala Ala Gln Val
        275             280             285

Ala Tyr Val Leu Gln Asp Trp Trp Leu Ser Tyr Trp Ala Asn Lys Gln
        290             295             300

Ser Met Leu Asn Val Thr Val Asn Gly Gly Gly Asn Val Thr Glu Lys
305             310             315             320

Leu Asp Leu Asn Trp Tyr Leu Gly Ile Tyr Ser Gly Leu Thr Val Ala
            325             330             335

Thr Val Leu Phe Gly Ile Ala Arg Ser Leu Leu Val Phe Tyr Val Leu
            340             345             350

Val Asn Ser Ser Gln Thr Leu His Asn Lys Met Phe Glu Ser Ile Leu
        355             360             365

Lys Ala Pro Val Leu Phe Phe Asp Arg Asn Pro Ile Gly Arg Ile Leu
        370             375             380

Asn Arg Phe Ser Lys Asp Ile Gly His Leu Asp Asp Leu Leu Pro Leu
385             390             395             400

Thr Phe Leu Asp Phe Ile Gln Val Thr Leu Arg Val Met Ser Gly Ser
            405             410             415

Gln Met Glu Asn Gly Ser Ser Tyr Phe Phe Lys Pro Phe Ser Trp Gly
            420             425             430

Leu Gly Val Gly Leu Ser Ala Trp Leu Cys Val Met Leu Thr
        435             440             445
```

```
<210> 1554
<211> 446
<212> PRT
<213> Homo sapiens

<400> 1554
Arg Lys Cys Glu Leu Ala His Cys Ser Leu Gly Val Phe Gly Val Arg
 1           5             10             15

Met Ala Leu Glu Gly Met Ser Lys Arg Lys Arg Lys Arg Ser Val Gln
            20             25             30

Glu Gly Glu Asn Pro Asp Asp Gly Val Arg Gly Ser Pro Pro Glu Asp
            35             40             45

Tyr Arg Leu Gly Gln Val Ala Ser Ser Leu Phe Arg Gly Glu His His
```

```
             50                    55                    60

Ser Arg Gly Gly Thr Gly Arg Leu Ala Ser Leu Phe Ser Ser Leu Glu
65                  70                  75                  80

Pro Gln Ile Gln Pro Val Tyr Val Pro Val Pro Lys Gln Thr Ile Lys
                    85                  90                  95

Lys Thr Lys Arg Asn Glu Glu Glu Ser Thr Ser Gln Ile Glu Arg
                100                 105                 110

Pro Leu Ser Gln Glu Pro Ala Lys Lys Val Lys Ala Lys Lys Lys His
            115                 120                 125

Thr Asn Ala Glu Lys Lys Leu Ala Asp Arg Glu Ser Ala Leu Ala Ser
    130                 135                 140

Ala Asp Leu Glu Glu Glu Ile His Gln Lys Gln Gly Gln Lys Arg Lys
145                 150                 155                 160

Asn Ser Gln Pro Gly Val Lys Val Ala Asp Arg Lys Ile Leu Asp Asp
                165                 170                 175

Thr Glu Asp Thr Val Val Ser Gln Arg Lys Lys Ile Gln Ile Asn Gln
            180                 185                 190

Glu Glu Glu Arg Leu Lys Asn Glu Arg Thr Val Phe Val Gly Asn Leu
        195                 200                 205

Pro Val Thr Cys Asn Lys Lys Lys Leu Lys Ser Phe Phe Lys Glu Tyr
    210                 215                 220

Gly Gln Ile Glu Ser Val Arg Phe Arg Ser Leu Ile Pro Ala Glu Gly
225                 230                 235                 240

Thr Leu Ser Lys Lys Leu Ala Ala Ile Lys Arg Lys Ile His Pro Asp
                245                 250                 255

Gln Lys Asn Ile Asn Ala Tyr Val Val Phe Lys Glu Glu Ser Ala Ala
            260                 265                 270

Thr Gln Ala Leu Lys Arg Asn Gly Ala Gln Ile Ala Asp Gly Phe Arg
        275                 280                 285

Ile Arg Val Asp Leu Ala Ser Glu Thr Ser Ser Arg Asp Lys Arg Ser
    290                 295                 300

Val Phe Val Gly Asn Leu Pro Tyr Lys Val Glu Glu Ser Ala Ile Glu
305                 310                 315                 320

Lys His Phe Leu Asp Cys Gly Ser Ile Met Ala Val Arg Ile Val Arg
```

```
                 325                    330                    335

Asp Lys Met Thr Gly Ile Gly Lys Gly Phe Gly Tyr Val Leu Phe Glu
             340                    345                    350

Asn Thr Asp Ser Val His Leu Ala Leu Lys Leu Asn Asn Ser Glu Leu
             355                    360                    365

Met Gly Arg Lys Leu Arg Val Met Arg Ser Val Asn Lys Glu Lys Phe
         370                    375                    380

Lys Gln Gln Asn Ser Asn Pro Arg Leu Lys Asn Val Ser Lys Pro Lys
385                    390                    395                    400

Gln Gly Leu Asn Phe Thr Ser Lys Thr Ala Glu Gly His Pro Lys Ser
                 405                    410                    415

Leu Phe Ile Gly Glu Lys Ala Val Leu Leu Lys Thr Lys Lys Lys Gly
             420                    425                    430

Gln Lys Lys Ser Gly Arg Pro Lys Lys Gln Arg Lys Gln Lys
             435                    440                    445
```

```
<210> 1555
<211> 115
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1555
Ala Thr Xaa Val Gln His Gln Arg Ile His Thr Gly Glu Arg Pro Tyr
  1                    5                    10                    15

Glu Cys Xaa Glu Cys Gly Lys Thr Phe Ser Arg Lys Asp Asn Leu Thr
                 20                    25                    30
```

Gln His Lys Arg Ile His Thr Gly Glu Met Pro Tyr Lys Cys Asn Glu
              35   40   45

Cys Gly Xaa Tyr Phe Ser His His Ser Asn Leu Ile Val His Gln Arg
         50   55   60

Val His Asn Gly Ala Arg Pro Tyr Lys Cys Ser Asp Cys Gly Lys Val
    65   70   75   80

Phe Arg His Lys Ser Thr Leu Val Gln His Glu Ser Ile His Thr Gly
                  85   90   95

Glu Asn Pro Tyr Val Ala Val Leu Trp Glu Ile Leu Trp Pro Gln Ile
              100   105   110

His Pro His
        115

<210> 1556
<211> 81
<212> PRT
<213> Homo sapiens

<400> 1556
Cys Gly Lys Thr Ala Ile Arg Lys Arg Lys Tyr Arg Ser Leu Asn Asn
  1   5   10   15

Leu Trp Val Arg Lys Ala Ser Leu Asn Asn Gln Lys Leu Ala Val Leu
              20   25   30

Ala Leu Phe Ser Ser Leu Phe Met Lys Met Lys Ser Glu Ile Thr Lys
          35   40   45

Cys Lys Pro Gly Asn Ile Ile Leu Val Leu Leu Ser Trp Ile His Val
         50   55   60

Lys Lys Arg Leu His Ser Leu Leu Met Leu Pro Thr Ser Cys Gly Phe
  65   70   75   80

Val

<210> 1557
<211> 398
<212> PRT
<213> Homo sapiens

<400> 1557
Phe Arg Glu Met Val Ser Ser Ser Asn Leu Pro Gln Gly Trp Leu Glu
 1   5   10   15

Val Gln Gly Ile Pro Glu Gly Trp Asp Gly Val Ala Gly Trp Tyr Leu
                20   25   30

Pro Gly Ile Asn Pro Gly Arg Thr Ala Arg Arg Phe Ala Tyr Leu Phe
            35   40   45

Val Asn Ile Asn Val Thr Ser Glu Pro His Glu Val Leu Ala Leu Trp
        50   55   60

Phe Leu Trp Tyr Val Lys Gln Cys Gly Gly Thr Thr Arg Ile Phe Ser
65   70   75   80

Val Thr Asn Gly Gly Gln Glu Arg Lys Phe Val Gly Gly Ser Gly Gln
                85   90   95

Val Ser Glu Arg Ile Met Asp Leu Leu Gly Asp Gln Val Lys Leu Asn
            100   105   110

His Pro Val Thr His Val Asp Gln Ser Ser Asp Asn Ile Ile Ile Glu
        115   120   125

Thr Leu Asn His Glu His Tyr Glu Cys Lys Tyr Val Ile Asn Ala Ile
    130   135   140

Pro Pro Thr Leu Thr Ala Lys Ile His Phe Arg Pro Glu Leu Pro Ala
145   150   155   160

Glu Arg Asn Gln Leu Ile Gln Arg Leu Pro Met Gly Ala Val Ile Lys
            165   170   175

Cys Met Met Tyr Tyr Lys Glu Ala Phe Trp Lys Lys Lys Asp Tyr Cys
            180   185   190

Gly Cys Met Ile Ile Glu Asp Glu Asp Ala Pro Ile Ser Ile Thr Leu
        195   200   205

Asp Asp Thr Lys Pro Asp Gly Ser Leu Pro Ala Ile Met Gly Phe Ile
    210   215   220

Leu Ala Arg Lys Ala Asp Arg Leu Ala Lys Leu His Lys Glu Ile Arg
225   230   235   240

Lys Lys Lys Ile Cys Glu Leu Tyr Ala Lys Val Leu Gly Ser Gln Glu
            245   250   255

Ala Leu His Pro Val His Tyr Glu Glu Lys Asn Trp Cys Glu Glu Gln

```
                260               265               270

Tyr Ser Gly Gly Cys Tyr Thr Ala Tyr Phe Pro Pro Gly Ile Met Thr
        275               280               285

Gln Tyr Gly Arg Val Ile Arg Gln Pro Val Gly Arg Ile Phe Phe Ala
        290               295               300

Gly Thr Glu Thr Ala Thr Lys Trp Ser Gly Tyr Met Glu Gly Ala Val
305               310               315               320

Glu Ala Gly Glu Arg Ala Ala Arg Glu Val Leu Asn Gly Leu Gly Lys
                325               330               335

Val Thr Glu Lys Asp Ile Trp Val Gln Glu Pro Glu Ser Lys Asp Val
                340               345               350

Pro Ala Val Glu Ile Thr His Thr Phe Trp Glu Arg Asn Leu Pro Ser
        355               360               365

Val Ser Gly Leu Leu Lys Ile Ile Gly Phe Ser Thr Ser Val Thr Ala
        370               375               380

Leu Gly Phe Val Leu Tyr Lys Tyr Lys Leu Leu Pro Arg Ser
385               390               395


<210> 1558
<211> 401
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1558
Ser Leu Ala Ala Pro Gly Ile Pro Glu His Arg Gln Arg Gly Thr Glu
  1               5               10               15

Lys Glu Ser Phe Phe Leu Gly Ser Gln Ser Arg Lys Gly Gly Ala Ala
                20               25               30

Leu Ala Pro Ser Ala Gly Pro Ala Pro Arg Met Arg Ala Asp Ala Gly
        35               40               45

Gly Arg Gly Cys Gly Ser Ala Asn Gly Xaa Pro Gly Ala Pro His Val
        50               55               60
```

```
Arg Ala Ala Gly Pro Ala Ala Ala Ala Val Pro Gly Ala Arg Val Val
65                  70              75              80

Cys Gly Gly Ser Arg Pro Arg Gln Gln Val Asp Ser Ser Lys Glu Ser
            85              90              95

Ala Glu Ala Ala Cys Asp Ile Leu Ser Gln Leu Val Asn Cys Ser Leu
        100             105             110

Lys Thr Leu Gly Leu Ile Ser Thr Ala Arg Pro Ser Phe Met Asp Leu
    115             120             125

Pro Lys Ser His Phe Ile Ser Ala Leu Thr Val Val Phe Val Asn Ser
    130             135             140

Lys Ser Leu Ser Ser Leu Lys Ile Asp Asp Thr Pro Val Asp Asp Pro
145             150             155             160

Ser Leu Lys Val Leu Val Ala Asn Asn Ser Asp Thr Leu Lys Leu Leu
            165             170             175

Lys Met Ser Ser Cys Pro His Val Ser Pro Ala Gly Ile Leu Cys Val
            180             185             190

Ala Asp Gln Cys His Gly Leu Arg Glu Leu Ala Leu Asn Tyr His Leu
        195             200             205

Leu Ser Asp Glu Leu Leu Leu Ala Leu Ser Ser Glu Lys His Val Arg
    210             215             220

Leu Glu His Leu Arg Ile Asp Val Val Ser Glu Asn Pro Gly Gln Thr
225             230             235             240

His Phe His Thr Ile Gln Lys Ser Ser Trp Asp Ala Phe Ile Arg His
            245             250             255

Ser Pro Lys Val Asn Leu Val Met Tyr Phe Phe Leu Tyr Glu Glu Glu
        260             265             270

Phe Asp Pro Phe Phe Arg Tyr Glu Ile Pro Ala Thr His Leu Tyr Phe
        275             280             285

Gly Arg Ser Val Ser Lys Asp Val Leu Gly Arg Val Gly Met Thr Cys
    290             295             300

Pro Arg Leu Val Glu Leu Val Val Cys Ala Asn Gly Leu Arg Pro Leu
305             310             315             320

Asp Glu Glu Leu Ile Arg Ile Ala Glu Arg Cys Lys Asn Leu Ser Ala
            325             330             335
```

```
Ile Gly Leu Gly Glu Cys Glu Val Ser Cys Ser Ala Phe Val Glu Phe
              340             345             350

Val Lys Met Cys Gly Gly Arg Leu Ser Gln Leu Ser Ile Met Glu Glu
          355             360             365

Val Leu Ile Pro Asp Gln Lys Tyr Ser Leu Glu Gln Ile His Trp Glu
      370             375             380

Val Ser Lys His Leu Gly Arg Val Trp Phe Pro Asp Met Met Pro Thr
385             390             395             400

Trp
```

```
<210> 1559
<211> 108
<212> PRT
<213> Homo sapiens

<400> 1559
Ala Gly Ala Gly Gly Arg Val Gly Asp Arg Ala Gly Val Arg Glu Arg
  1           5             10             15

Gln Gln Ser Gly His Arg His Ser Glu Gln Pro Arg Arg Arg Leu Cys
              20             25             30

Val Pro Val Asp Cys Leu Ala Ala Pro Ser Pro Thr Pro Arg Phe Leu
          35             40             45

Val Lys Arg Leu Arg Ala Ala Val Trp Gly Gly Gly Val Trp Ser Arg
      50             55             60

Val Leu Cys Pro Gln Trp Leu Leu Ser Gly Gly Arg Leu Phe Ala Glu
 65             70             75             80

Val Arg Arg Asp Ser Leu Gly Val Glu His Ile Thr Gly Phe Gly Cys
              85             90             95

Leu Val Cys Glu His His Arg Val Cys Gly Cys Thr
              100             105
```

```
<210> 1560
<211> 68
<212> PRT
<213> Homo sapiens
```

<400> 1560

```
Glu Leu Ser Pro Leu Ser Phe Arg Ser Thr Arg Gly Phe His Thr Tyr
 1               5                  10                  15

Phe Ile Glu His Pro Phe Ile Phe Ile Ser Val Tyr Arg Thr Lys Lys
            20                  25                  30

Asn Ser Ser Val Lys Asn Leu Cys Cys Gly Leu Ser Ile Phe Ala Ala
            35                  40                  45

Phe Gly Leu Arg Trp Arg Ile Lys Ala Ser Leu Pro Leu Ser Ser Val
        50                  55                  60

Phe Arg Lys Leu
65
```

<210> 1561
<211> 80
<212> PRT
<213> Homo sapiens

<400> 1561

```
Leu Met Met Thr Ile Tyr Ala Leu Ser Asn Glu Phe Ala Phe Lys Ile
 1               5                  10                  15

Asn Glu Glu Gln Leu Ser Phe Phe Pro Leu Leu Ser Val Gln Leu Trp
            20                  25                  30

His Ala Gln Arg Phe Leu Leu Asp Ser Ser Trp Ser Gly Val Ile Pro
            35                  40                  45

Phe Phe Phe Ser Cys Ser Cys Leu Pro Phe Leu Tyr Pro Pro Lys Trp
        50                  55                  60

Arg Gln Ile His Asp Leu Lys Asp Thr Gln Tyr Leu Leu Asn Ser Ser
65                  70                  75                  80
```

<210> 1562
<211> 198
<212> PRT
<213> Homo sapiens

<220>
<221> SITE

```
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (193)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1562
Arg Gly Leu Xaa Ser Arg Gly Ala Gly Gln Val Pro Gly Cys Leu Gly
 1           5                  10                 15

Trp His Arg Ser Val Val Pro Gly Gly Ala Val Ala Ala Leu Pro Pro
            20                  25                 30

Ser Arg Arg Gln Arg Val Arg Gly Pro Val Arg Pro Glu Pro Gly Ala
        35                  40                 45

Thr Pro Arg Ala Val Leu Gly Glu Thr Arg Val Pro Val Leu Arg Leu
    50                  55                 60

Leu Leu Gly Ser Ala Leu Val Gly Arg Leu Leu Asp Ser Leu Lys Arg
65                  70                 75                 80

Asp Tyr Ala Gly Lys Pro Gln Pro Pro Ile Lys Ser Glu Arg Arg Asn
                85                  90                 95

Pro Pro Ser Tyr Ala Met Ala Gly Lys Lys Val Leu Ile Val Tyr Ala
            100                 105                110

His Gln Glu Pro Lys Ser Phe Asn Gly Ser Leu Lys Asn Val Ala Val
        115                 120                 125

Asp Glu Leu Ser Arg Gln Gly Cys Thr Val Thr Val Ser Asp Leu Tyr
    130                 135                 140

Ala Met Asn Phe Glu Pro Arg Ala Thr Asp Lys Asp Ile Thr Gly Thr
145                 150                 155                160

Leu Ser Asn Pro Glu Val Phe Asn Tyr Gly Val Glu Thr His Glu Ala
                165                 170                 175

Tyr Lys Gln Arg Ser Leu Ala Ser Asp Ile Thr Asp Glu Gln Lys Lys
            180                 185                 190

Xaa Ser Gly Arg Leu Thr
            195


<210> 1563
```

<211> 488
<212> PRT
<213> Homo sapiens

<400> 1563
```
Gly Arg Glu Ala Ser Lys Met Ala Gln Thr Gln Gly Thr Arg Arg Lys
 1               5                  10                  15

Val Cys Tyr Tyr Tyr Asp Gly Asp Val Gly Asn Tyr Tyr Tyr Gly Gln
                20              25                  30

Gly His Pro Met Lys Pro His Arg Ile Arg Met Thr His Asn Leu Leu
        35              40                  45

Leu Asn Tyr Gly Leu Tyr Arg Lys Met Glu Ile Tyr Arg Pro His Lys
        50                  55                  60

Ala Asn Ala Glu Glu Met Thr Lys Tyr His Ser Asp Asp Tyr Ile Lys
65              70                  75                      80

Phe Leu Arg Ser Ile Arg Pro Asp Asn Met Ser Glu Tyr Ser Lys Gln
                85                  90                  95

Met Gln Arg Phe Asn Val Gly Glu Asp Cys Pro Val Phe Asp Gly Leu
            100                 105                 110

Phe Glu Phe Cys Gln Leu Ser Thr Gly Gly Ser Val Ala Ser Ala Val
            115                 120                 125

Lys Leu Asn Lys Gln Gln Thr Asp Ile Ala Val Asn Trp Ala Gly Gly
        130                 135                 140

Leu His His Ala Lys Lys Ser Glu Ala Ser Gly Phe Cys Tyr Val Asn
145                 150                 155                 160

Asp Ile Val Leu Ala Ile Leu Glu Leu Leu Lys Tyr His Gln Arg Val
                165                 170                 175

Leu Tyr Ile Asp Ile Asp Ile His His Gly Asp Gly Val Glu Glu Ala
            180                 185                 190

Phe Tyr Thr Thr Asp Arg Val Met Thr Val Ser Phe His Lys Tyr Gly
            195                 200                 205

Glu Tyr Phe Pro Gly Thr Gly Asp Leu Arg Asp Ile Gly Ala Gly Lys
        210                 215                 220

Gly Lys Tyr Tyr Ala Val Asn Tyr Pro Leu Arg Asp Gly Ile Asp Asp
225                 230                 235                 240

Glu Ser Tyr Glu Ala Ile Phe Lys Pro Val Met Ser Lys Val Met Glu
```

```
                    245                      250                      255

    Met Phe Gln Pro Ser Ala Val Val Leu Gln Cys Gly Ser Asp Ser Leu
                 260                 265                 270

    Ser Gly Asp Arg Leu Gly Cys Phe Asn Leu Thr Ile Lys Gly His Ala
                 275                 280                 285

    Lys Cys Val Glu Phe Val Lys Ser Phe Asn Leu Pro Met Leu Met Leu
                 290                 295                 300

    Gly Gly Gly Gly Tyr Thr Ile Arg Asn Val Ala Arg Cys Trp Thr Tyr
    305                 310                 315                 320

    Glu Thr Ala Val Ala Leu Asp Thr Glu Ile Pro Asn Glu Leu Pro Tyr
                     325                 330                 335

    Asn Asp Tyr Phe Glu Tyr Phe Gly Pro Asp Phe Lys Leu His Ile Ser
                 340                 345                 350

    Pro Ser Asn Met Thr Asn Gln Asn Thr Asn Glu Tyr Leu Glu Lys Ile
                 355                 360                 365

    Lys Gln Arg Leu Phe Glu Asn Leu Arg Met Leu Pro His Ala Pro Gly
                 370                 375                 380

    Val Gln Met Gln Ala Ile Pro Glu Asp Ala Ile Pro Glu Glu Ser Gly
    385                 390                 395                 400

    Asp Glu Asp Glu Asp Asp Pro Asp Lys Arg Ile Ser Ile Cys Ser Ser
                     405                 410                 415

    Asp Lys Arg Ile Ala Cys Glu Glu Glu Phe Ser Asp Ser Glu Glu Glu
                 420                 425                 430

    Gly Glu Gly Gly Arg Lys Asn Ser Ser Asn Phe Lys Lys Ala Lys Arg
                 435                 440                 445

    Val Lys Thr Glu Asp Glu Lys Glu Lys Asp Pro Glu Glu Lys Lys Glu
                 450                 455                 460

    Val Thr Glu Glu Glu Lys Thr Lys Glu Glu Lys Pro Glu Ala Lys Gly
    465                 470                 475                 480

    Val Lys Glu Glu Val Lys Leu Ala
                     485


<210> 1564
<211> 197
```

```
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (155)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (178)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (179)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (187)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (189)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1564
Ala Arg Ser Ser Leu Trp Arg Arg Gln Pro Gly Trp Gln Leu Thr Gly
 1               5                  10                  15

Gln Pro Gly Ser Ile Leu Leu Arg Val Phe Ser Lys Ser Arg Ala Gly
            20                  25                  30

Leu Glu Ala Arg Lys Leu Lys Ala Tyr Arg Thr Met Glu Tyr Met Ala
            35                  40                  45

Glu Ser Thr Asp Arg Ser Pro Gly His Ile Leu Cys Cys Glu Cys Gly
        50                  55                  60

Val Pro Ile Ser Pro Asn Pro Ala Asn Ile Cys Val Ala Cys Leu Arg
 65                  70                  75                  80

Ser Lys Val Asp Ile Ser Gln Gly Ile Pro Lys Gln Val Ser Ile Ser
                85                  90                  95

Phe Cys Lys Gln Cys Gln Arg Tyr Phe Gln Pro Pro Gly Thr Trp Ile
                100                 105                 110

Gln Cys Ala Leu Glu Ser Arg Glu Leu Leu Ala Leu Cys Leu Lys Lys
```

```
                115                    120                    125

    Ile Lys Ala Pro Leu Ser Lys Val Arg Leu Val Asp Ala Gly Phe Val
        130                 135                 140

    Trp Thr Glu Pro His Ser Lys Arg Leu Lys Xaa Lys Leu Thr Ile Gln
    145                 150                 155                 160

    Lys Glu Val Met Asn Gly Ala Ile Leu Gln Gln Val Phe Val Val Asp
                    165                 170                 175

    Tyr Xaa Xaa Pro Lys Trp Gly Glu Met Ala Xaa Arg Xaa Leu Arg Ile
                180                 185                 190

    Leu Glu Arg Leu Asp
                195



    <210> 1565
    <211> 197
    <212> PRT
    <213> Homo sapiens

    <220>
    <221> SITE
    <222> (179)
    <223> Xaa equals any of the naturally occurring L-amino acids

    <220>
    <221> SITE
    <222> (189)
    <223> Xaa equals any of the naturally occurring L-amino acids

    <220>
    <221> SITE
    <222> (190)
    <223> Xaa equals any of the naturally occurring L-amino acids

    <400> 1565
    Met Gln Phe Ala Trp Gln Ser Tyr Lys Arg Tyr Ala Met Gly Lys Asn
      1                 5                 10                 15

    Glu Leu Arg Pro Leu Thr Lys Asp Gly Tyr Glu Gly Asn Met Phe Gly
                 20                 25                 30

    Gly Leu Ser Gly Ala Thr Val Ile Asp Ser Leu Asp Thr Leu Tyr Leu
                 35                 40                 45

    Met Glu Leu Lys Glu Glu Phe Gln Glu Ala Lys Ala Trp Val Gly Glu
                 50                 55                 60
```

```
Ser Phe His Leu Asn Val Ser Gly Glu Ala Ser Leu Phe Glu Val Asn
65                  70                  75                  80

Ile Arg Tyr Ile Gly Gly Leu Leu Ser Ala Phe Tyr Leu Thr Gly Glu
                85                  90                  95

Glu Val Phe Arg Ile Lys Ala Ile Arg Leu Gly Glu Lys Leu Leu Pro
                100                 105             110

Ala Phe Asn Thr Pro Thr Gly Ile Pro Lys Gly Val Val Ser Phe Lys
            115                 120                 125

Ser Gly Asn Trp Gly Trp Ala Thr Ala Gly Ser Ser Ser Ile Leu Ala
        130                 135                 140

Glu Phe Gly Ser Leu His Leu Glu Phe Leu His Leu Thr Glu Leu Ser
145                 150                 155                 160

Gly Asn Gln Val Phe Ala Glu Lys Val Arg Asn Ile Arg Lys Val Leu
                165                 170                 175

Arg Lys Xaa Glu Lys Pro Phe Gly Leu Tyr Ser Asn Xaa Xaa Met Val
            180                 185                 190

Leu Gln Thr Asp Pro
            195


<210> 1566
<211> 240
<212> PRT
<213> Homo sapiens

<400> 1566
Ala Asp Pro Glu Gly Gln Ala Gly Arg Ala Gly Arg Ala Leu Arg Arg
1               5               10                  15

His Gly His Leu His Glu Gly Ser Asp Arg Ala Gly Arg Arg Ala Val
            20                  25                  30

Gln Arg Gly Ala Gln Pro Ala Leu Arg Gly Leu Gln Glu Arg Gly Arg
        35                  40                  45

Gly Pro Gln Ser Ala Trp Arg Val Ile Ser Ser Ile Glu Gln Lys Thr
    50                  55                  60

Asp Thr Ser Asp Lys Lys Leu Gln Leu Ile Lys Asp Tyr Arg Glu Lys
65                  70                  75                  80
```

```
Val Glu Ser Glu Leu Arg Ser Ile Cys Thr Thr Val Leu Glu Leu Leu
             85                  90                  95

Asp Lys Tyr Leu Ile Ala Asn Ala Thr Asn Pro Glu Ser Lys Val Phe
            100                 105                 110

Tyr Leu Lys Met Lys Gly Asp Tyr Phe Arg Tyr Leu Ala Glu Val Ala
            115                 120                 125

Cys Gly Asp Asp Arg Lys Gln Thr Ile Asp Asn Ser Gln Gly Ala Tyr
    130                 135                 140

Gln Glu Ala Phe Asp Ile Ser Lys Lys Glu Met Gln Pro Thr His Pro
145                 150                 155                 160

Ile Arg Leu Gly Leu Ala Leu Asn Phe Ser Val Phe Tyr Tyr Glu Ile
            165                 170                 175

Leu Asn Asn Pro Glu Leu Ala Cys Thr Leu Ala Lys Thr Ala Phe Asp
            180                 185                 190

Glu Ala Ile Ala Glu Leu Asp Thr Leu Asn Glu Asp Ser Tyr Lys Asp
            195                 200                 205

Ser Thr Leu Ile Met Gln Leu Leu Arg Asp Asn Leu Thr Leu Trp Thr
    210                 215                 220

Ser Asp Ser Ala Gly Glu Glu Cys Asp Ala Ala Glu Gly Ala Glu Asn
225                 230                 235                 240
```

<210> 1567
<211> 220
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1567
```
Lys Ala Arg Arg Arg Gly Thr Met Ala Ala Ala Ala Asp Glu Arg Ser
  1             5                  10                  15

Pro Glu Asp Gly Glu Asp Glu Glu Glu Glu Glu Gln Leu Val Leu Val
            20                  25                  30
```

Glu Leu Ser Gly Ile Ile Asp Ser Xaa Phe Leu Ser Lys Cys Glu Asn
        35   40   45

Lys Cys Lys Val Leu Gly Ile Asp Thr Glu Arg Pro Ile Leu Gln Val
        50   55   60

Asp Ser Cys Val Phe Ala Gly Glu Tyr Glu Asp Thr Leu Gly Thr Cys
65   70   75   80

Val Ile Phe Glu Glu Asn Val Glu His Ala Asp Thr Glu Gly Asn Asn
            85   90   95

Lys Thr Val Leu Lys Tyr Lys Cys His Thr Met Lys Lys Leu Ser Met
        100   105   110

Thr Arg Thr Leu Leu Thr Glu Lys Lys Glu Gly Glu Glu Asn Ile Gly
        115   120   125

Gly Val Glu Trp Leu Gln Ile Lys Asp Asn Asp Phe Ser Tyr Arg Pro
    130   135   140

Asn Met Ile Cys Asn Phe Leu His Glu Asn Glu Asp Glu Glu Val Val
145   150   155   160

Ala Ser Ala Pro Asp Lys Ser Leu Glu Leu Glu Glu Glu Glu Ile Gln
            165   170   175

Met Asn Asp Ser Ser Asn Leu Ser Cys Glu Gln Glu Lys Pro Met His
            180   185   190

Leu Glu Ile Glu Asp Ser Gly Pro Leu Ile Asp Ile Pro Ser Glu Thr
        195   200   205

Glu Gly Ser Val Phe Met Glu Thr Gln Met Leu Pro
    210   215   220

<210> 1568
<211> 180
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE

<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1568
```
Ala Trp Gln Glu Phe Gly Gln Xaa Pro Gly Ala Xaa Trp Gln Arg Arg
 1               5                  10                  15

Cys Ala Cys Val Val Glu Cys Ser Gly Arg Arg Pro Ala Gly Ala Met
                20                  25                  30

Val Phe Leu Thr Ala Gln Leu Trp Leu Arg Asn Arg Val Thr Asp Arg
                35                  40                  45

Tyr Phe Arg Ile Gln Glu Val Leu Lys His Ala Arg His Phe Arg Gly
            50                  55                  60

Arg Lys Asn Arg Cys Tyr Arg Leu Ala Val Arg Thr Val Ile Arg Ala
 65                  70                  75                  80

Phe Val Lys Cys Thr Lys Ala Arg Tyr Leu Lys Lys Lys Asn Met Arg
                85                  90                  95

Thr Leu Trp Ile Asn Arg Ile Thr Ala Ala Ser Gln Glu His Gly Leu
                100                 105                 110

Lys Tyr Pro Ala Leu Ile Gly Asn Leu Val Lys Cys Gln Val Glu Leu
            115                 120                 125

Asn Arg Lys Val Leu Ala Asp Leu Ala Ile Tyr Glu Pro Lys Thr Phe
    130                 135                 140

Lys Ser Leu Ala Ala Leu Ala Ser Arg Arg Arg His Glu Gly Phe Ala
145                 150                 155                 160

Ala Ala Leu Gly Asp Gly Lys Glu Pro Glu Gly Ile Phe Ser Arg Val
                165                 170                 175

Val Gln Tyr His
                180
```

<210> 1569
<211> 160
<212> PRT
<213> Homo sapiens

<400> 1569
```
Ala Gly Pro Tyr Ala Asp Ser Ile Trp Ala Pro Ala Arg Ser Ala Ala
 1               5                  10                  15
```

Gly Gln Arg Gly Val Ala Met Ala Glu Leu Gln Gln Leu Arg Val Gln
              20   25   30

Glu Ala Val Glu Ser Met Val Lys Ser Leu Glu Arg Glu Asn Ile Arg
              35   40   45

Lys Met Gln Gly Leu Met Phe Arg Cys Ser Ala Ser Cys Cys Glu Asp
              50   55   60

Ser Gln Ala Ser Met Lys Gln Val His Gln Cys Ile Glu Arg Cys His
    65   70   75   80

Val Pro Leu Ala Gln Ala Gln Ala Leu Val Thr Ser Glu Leu Glu Lys
                   85   90   95

Phe Gln Asp Arg Leu Ala Arg Cys Thr Met His Cys Asn Asp Lys Ala
              100   105   110

Lys Asp Ser Ile Asp Ala Gly Ser Lys Glu Leu Gln Val Lys Gln Gln
              115   120   125

Leu Asp Ser Cys Val Thr Lys Cys Val Asp Asp His Met His Leu Ile
    130   135   140

Pro Thr Met Thr Lys Lys Met Lys Glu Ala Leu Leu Ser Ile Gly Lys
145   150   155   160

<210> 1570
<211> 77
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1570
Gly Leu Ser Asp His Leu Val Phe Pro Phe Ser Ala Xaa His Val Ser
  1   5   10   15

Arg Gly Val Ala Pro Tyr His Thr Ser Arg Ala Pro Glu Pro Tyr Phe
                   20   25   30

Leu Ile Ser Ser Gly Leu Asp Phe Pro Val Leu His Gln Gln Leu Gln
                   35   40   45

Tyr Pro Lys Leu Ser Ser Pro Ala Asp Pro Pro Ser Asn Gly Val Glu
    50   55   60

Thr Gly Gly Gln Cys Leu Val Cys Phe Leu Arg Asn Leu
65   70   75

<210> 1571
<211> 218
<212> PRT
<213> Homo sapiens

<400> 1571
Glu Gly Pro Ile Pro Trp Gly Arg Arg Arg Glu Pro Glu Pro Leu
    1   5   10   15

Leu Pro Met Ala Lys Lys Thr Tyr Asp Leu Leu Phe Lys Leu Leu Leu
            20   25   30

Ile Gly Asp Ser Gly Val Gly Lys Thr Cys Val Leu Phe Arg Phe Ser
            35   40   45

Asp Asp Ala Phe Asn Thr Thr Phe Ile Ser Thr Ile Gly Ile Asp Phe
    50   55   60

Lys Ile Lys Thr Val Glu Leu Gln Gly Lys Lys Ile Lys Leu Gln Ile
65   70   75   80

Trp Asp Thr Ala Gly Gln Glu Arg Phe His Thr Ile Thr Thr Ser Tyr
                85   90   95

Tyr Arg Gly Ala Met Gly Ile Met Leu Val Tyr Asp Ile Thr Asn Gly
            100   105   110

Lys Ser Phe Glu Asn Ile Ser Lys Trp Leu Arg Asn Ile Asp Glu His
            115   120   125

Ala Asn Glu Asp Val Glu Arg Met Leu Leu Gly Asn Lys Cys Asp Met
    130   135   140

Asp Asp Lys Arg Val Val Pro Lys Gly Lys Gly Glu Gln Ile Ala Arg
145   150   155   160

Glu His Gly Ile Arg Phe Phe Glu Thr Ser Ala Lys Ala Asn Ile Asn
                165   170   175

Ile Glu Lys Ala Phe Leu Thr Leu Ala Glu Asp Ile Leu Arg Lys Thr
            180   185   190

```
Pro Val Lys Glu Pro Asn Ser Glu Asn Val Asp Ile Ser Ser Gly Gly
        195                 200                 205

Gly Val Thr Gly Trp Lys Ser Lys Cys Cys
    210                 215



<210> 1572
<211> 265
<212> PRT
<213> Homo sapiens

<400> 1572
Arg Asn Leu Leu Ala Trp Pro Arg Arg Leu Ser Gly Ile Ala Arg Ala
  1             5                 10                  15

Leu Arg Phe Ile Ala Thr Pro Arg Leu Ser Ala Met Pro His Ile Asp
            20                  25                  30

Asn Asp Val Lys Leu Asp Phe Lys Asp Val Leu Leu Arg Pro Lys Arg
            35                  40                  45

Ser Thr Leu Lys Ser Arg Ser Glu Val Asp Leu Thr Arg Ser Phe Ser
        50                  55                  60

Phe Arg Asn Ser Lys Gln Thr Tyr Ser Gly Val Pro Ile Ile Ala Ala
 65                 70                  75                  80

Asn Met Asp Thr Val Gly Thr Phe Glu Met Ala Lys Val Leu Cys Lys
                85                  90                  95

Phe Ser Leu Phe Thr Ala Val His Lys His Tyr Ser Leu Val Gln Trp
            100                 105                 110

Gln Glu Phe Ala Gly Gln Asn Pro Asp Cys Leu Glu His Leu Ala Ala
            115                 120                 125

Ser Ser Gly Thr Gly Ser Ser Asp Phe Glu Gln Leu Glu Gln Ile Leu
    130                 135                 140

Glu Ala Ile Pro Gln Val Lys Tyr Ile Cys Leu Asp Val Ala Asn Gly
145                 150                 155                 160

Tyr Ser Glu His Phe Val Glu Phe Val Lys Asp Val Arg Lys Arg Phe
            165                 170                 175

Pro Gln His Thr Ile Met Ala Gly Asn Val Val Thr Gly Glu Met Val
            180                 185                 190

Glu Glu Leu Ile Leu Ser Gly Ala Asp Ile Ile Lys Val Gly Ile Gly
```

```
             195                    200                    205

      Pro Gly Ser Val Cys Thr Thr Arg Lys Lys Thr Gly Val Gly Tyr Pro
          210                     215                220

      Gln Leu Ser Ala Val Met Glu Cys Ala Asp Ala Ala His Gly Leu Lys
      225                     230                235                240

      Gly Thr Ser Phe Gln Met Glu Val Ala Ala Val Leu Gly Met Trp Pro
                          245                250                255

      Arg Leu Leu Gly Gln Glu Leu Thr Ser
                      260                265
```

<210> 1573
<211> 128
<212> PRT
<213> Homo sapiens

<400> 1573

```
      Glu Thr Thr Thr Thr Thr Leu Trp Arg Arg Asn Ala Asn Gly Asp Pro
       1                 5                 10                     15

      Val Cys Asn Ala Cys Gly Leu Tyr Tyr Lys Leu His Asn Val Asn Arg
                      20                25                     30

      Pro Leu Thr Met Lys Lys Glu Gly Ile Gln Thr Arg Asn Arg Lys Met
                  35                40                     45

      Ser Asn Lys Ser Lys Lys Ser Lys Lys Gly Ala Glu Cys Phe Glu Glu
              50                     55                60

      Leu Ser Lys Cys Met Gln Glu Lys Ser Ser Pro Phe Ser Ala Ala Ala
      65                     70                75                     80

      Leu Ala Gly His Met Ala Pro Val Gly His Leu Pro Pro Phe Ser His
                          85                90                     95

      Ser Gly His Ile Leu Pro Thr Pro Thr Pro Ile His Pro Ser Ser Ser
                          100                105                110

      Leu Ser Phe Gly His Pro His Pro Ser Ser Met Val Thr Ala Met Gly
                  115                120                     125
```

<210> 1574
<211> 334
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1574
```
Gly Ala Arg Xaa Asp Arg Ala Leu Leu Arg Pro Pro Leu Leu Arg Glu
 1               5                  10                  15

Leu Thr Pro Arg Ser Pro Arg Pro Pro Leu Ala Pro Ala Ala Arg Pro
                20                  25                  30

Ser Trp Pro Cys Leu Cys Leu Asp Gly Gly Val Ser Gly Val Phe Val
            35                  40                  45

Trp Asp Glu Glu Arg Ile Gln Glu Glu Glu Leu Gln Arg Ser Ile Asn
        50                  55                  60

Glu Met Lys Arg Leu Glu Glu Met Ser Asn Met Phe Gln Ser Ser Gly
 65                  70                  75                  80

Val Gln His His Pro Pro Glu Pro Lys Ala Gln Thr Glu Gly Asn Glu
                85                  90                  95

Asp Ser Glu Gly Lys Glu Gln Arg Trp Glu Met Val Met Asp Lys Lys
                100                 105                 110

His Phe Lys Leu Trp Arg Arg Pro Ile Thr Gly Thr His Leu Tyr Gln
            115                 120                 125

Tyr Arg Val Phe Gly Thr Tyr Thr Asp Val Thr Pro Arg Gln Phe Phe
    130                 135                 140

Asn Val Gln Leu Asp Thr Glu Tyr Arg Lys Lys Trp Asp Ala Leu Val
145                 150                 155                 160

Ile Lys Leu Glu Val Ile Glu Arg Asp Val Val Ser Gly Ser Glu Val
                165                 170                 175

Leu His Trp Val Thr His Phe Pro Tyr Pro Met Tyr Ser Arg Asp Tyr
                180                 185                 190

Val Tyr Val Arg Arg Tyr Ser Val Asp Gln Glu Asn Asn Met Met Val
                195                 200                 205

Leu Val Ser Arg Ala Val Glu His Pro Ser Val Pro Glu Ser Pro Glu
```

```
        210                    215                    220

Phe Val Arg Val Arg Ser Tyr Glu Ser Gln Met Val Ile Arg Pro His
225                 230                 235                 240

Lys Ser Phe Asp Glu Asn Gly Phe Asp Tyr Leu Leu Thr Tyr Ser Asp
                245                 250                 255

Asn Pro Gln Thr Val Phe Pro Arg Tyr Cys Val Ser Trp Met Val Ser
                260                 265                 270

Ser Gly Met Pro Asp Phe Leu Glu Lys Leu His Met Ala Thr Leu Lys
            275                 280                 285

Ala Lys Asn Met Glu Ile Lys Val Lys Asp Tyr Ile Ser Ala Lys Pro
        290                 295                 300

Leu Glu Met Ser Ser Glu Ala Lys Ala Thr Ser Gln Ser Ser Glu Arg
305                 310                 315                 320

Lys Asn Glu Gly Ser Cys Gly Pro Ala Arg Ile Glu Tyr Ala
                325                 330
```

<210> 1575
<211> 335
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (125)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (218)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (219)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (268)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1575

```
Pro Ser Ala Pro Arg Ala Leu Thr Leu Gln Arg Arg Lys Ile Gly Arg
 1           5               10              15

Arg Gly Gln Ala Leu Met Leu Val Ser Gly Arg Arg Arg Leu Leu Thr
            20              25              30

Val Leu Leu Gln Ala Gln Lys Trp Pro Phe Gln Pro Ser Arg Asp Met
        35              40              45

Arg Leu Val Gln Phe Arg Ala Pro His Leu Val Gly Pro His Leu Gly
        50              55              60

Leu Glu Thr Gly Asn Gly Gly Gly Val Ile Asn Leu Asn Ala Phe Asp
 65              70              75              80

Pro Thr Leu Pro Lys Thr Met Thr Gln Phe Leu Glu Gln Gly Glu Ala
                85              90              95

Thr Leu Ser Val Ala Arg Arg Ala Leu Ala Ala Gln Leu Pro Val Leu
            100             105             110

Pro Arg Ser Glu Val Thr Phe Leu Ala Pro Val Thr Xaa Pro Asp Lys
        115             120             125

Val Val Cys Val Gly Met Asn Tyr Val Asp His Cys Lys Glu Gln Asn
        130             135             140

Val Pro Val Pro Lys Glu Pro Ile Ile Phe Ser Lys Phe Ala Ser Ser
145             150             155             160

Ile Val Gly Pro Tyr Asp Glu Val Val Leu Pro Pro Gln Ser Gln Glu
            165             170             175

Val Asp Trp Glu Val Glu Leu Ala Val Val Ile Gly Lys Lys Gly Lys
            180             185             190

His Ile Lys Ala Thr Asp Ala Met Ala His Val Ala Gly Phe Thr Val
            195             200             205

Ala His Asp Val Ser Ala Arg Asp Trp Xaa Xaa Arg Arg Asn Gly Lys
        210             215             220

Gln Trp Leu Leu Gly Lys Thr Phe Asp Thr Phe Cys Pro Leu Gly Pro
225             230             235             240

Ala Leu Val Thr Lys Asp Ser Val Ala Asp Pro His Asn Leu Lys Ile
            245             250             255

Cys Cys Arg Val Asn Gly Glu Val Val Gln Ser Xaa Asn Thr Asn Gln
            260             265             270
```

```
Met Val Phe Lys Thr Glu Asp Leu Ile Ala Trp Val Ser Gln Phe Val
         275             280             285

Thr Phe Tyr Pro Gly Asp Val Ile Leu Thr Gly Thr Pro Pro Gly Val
         290             295             300

Gly Val Phe Arg Lys Pro Pro Val Phe Leu Lys Lys Gly Asp Glu Val
305             310             315             320

Gln Cys Glu Ile Glu Glu Leu Gly Val Ile Ile Asn Lys Val Val
             325             330             335
```

<210> 1576
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1576
```
Ile Pro Glu Asp Pro His Ile Asp Glu Ser Lys Ala Lys His Gln Ala
1               5               10              15

Ile Ile Met Ser Thr Ser Leu Arg Val Ser Pro Ser Ile His Gly Tyr
             20              25              30

His Phe Asp Thr Ala Ser Arg Lys Lys Ala Val Gly Asn Ile Phe Glu
             35              40              45

Asn Thr Asp Gln Glu Ser Leu Glu Arg Leu Phe Arg Asn Ser Gly Asp
         50              55              60

Lys Lys Ala Glu Glu Arg Ala Lys Ile Ile Phe Ala Ile Asp Gln Asp
65              70              75              80

Val Glu Glu Lys Thr Arg Ala Leu Met Ala Leu Lys Lys Arg Thr Lys
             85              90              95

Asp Lys Leu Phe Gln Phe Leu Lys Leu Arg Lys Tyr Ser Ile Lys Val
             100             105             110

His
```

<210> 1577
<211> 212
<212> PRT
<213> Homo sapiens

```
<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1577
Gly Ala Ser Trp Xaa Ala Leu Thr Ala Ala Ser Ala Pro Gly Pro Trp
 1               5                  10                  15

Pro Leu Ser Gly Met Ala Cys Gly Ala Thr Leu Lys Arg Pro Met Glu
                20                  25                  30

Phe Glu Ala Ala Leu Leu Ser Pro Gly Ser Pro Lys Arg Arg Arg Cys
                35                  40                  45

Ala Pro Leu Pro Gly Pro Thr Pro Gly Leu Arg Pro Pro Asp Ala Glu
        50                  55                  60

Pro Pro Pro Pro Phe Gln Thr Gln Thr Pro Pro Gln Ser Leu Gln Gln
 65                  70                  75                  80

Pro Ala Pro Pro Gly Ser Glu Arg Arg Leu Pro Thr Pro Glu Gln Ile
                85                  90                  95

Phe Gln Asn Ile Lys Gln Glu Tyr Ser Arg Tyr Gln Arg Trp Arg His
                100                 105                 110

Leu Glu Val Val Leu Asn Gln Ser Glu Ala Cys Ala Ser Glu Ser Gln
            115                 120                 125

Pro His Ser Ser Ala Leu Thr Ala Pro Ser Ser Pro Gly Ser Ser Trp
    130                 135                 140

Met Lys Lys Asp Gln Pro Thr Phe Thr Leu Arg Gln Val Gly Ile Ile
145                 150                 155                 160

Cys Glu Arg Leu Leu Lys Asp Tyr Glu Asp Lys Ile Arg Glu Glu Tyr
                165                 170                 175

Glu Gln Ile Leu Asn Thr Lys Leu Ala Glu Gln Tyr Glu Ser Phe Val
                180                 185                 190

Lys Phe Thr His Asp Gln Ile Met Arg Arg Tyr Gly Thr Arg Pro Thr
        195                 200                 205

Ser Tyr Val Ser
    210
```

```
<210> 1578
```

```
<211> 393
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (209)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1578
Arg Arg Arg Arg Glu Ala Gln Glu Lys Arg Tyr Tyr Tyr Asp Leu Asp
 1               5                  10                  15

Asp Ser Tyr Asp Glu Ser Asp Glu Glu Glu Val Arg Ala His Leu Arg
                20                  25                  30

Cys Val Ala Glu Gln Pro Pro Leu Lys Leu Asp Thr Ser Ser Glu Lys
            35                  40                  45

Leu Glu Phe Leu Gln Leu Phe Gly Leu Thr Thr Gln Gln Gln Lys Glu
        50                  55                  60

Glu Leu Val Ala Gln Lys Arg Arg Lys Arg Arg Arg Met Leu Arg Glu
65                  70                  75                  80

Arg Ser Pro Ser Pro Pro Thr Ile Gln Ser Lys Arg Gln Thr Pro Ser
                85                  90                  95

Pro Arg Leu Ala Leu Ser Thr Arg Tyr Ser Pro Asp Glu Met Asn Asn
            100                 105                 110

Ser Pro Asn Phe Glu Glu Lys Lys Lys Phe Leu Thr Ile Phe Asn Leu
            115                 120                 125

Thr His Ile Ser Ala Glu Lys Arg Lys Asp Lys Glu Arg Leu Val Glu
        130                 135                 140

Met Leu Arg Ala Met Lys Gln Lys Ala Leu Ser Ala Ala Val Ala Asp
145                 150                 155                 160

Ser Leu Thr Asn Ser Pro Arg Asp Ser Pro Ala Val Ser Leu Ser Glu
                165                 170                 175

Pro Ala Thr Gln Gln Ala Ser Leu Asp Val Glu Lys Pro Val Gly Val
                180                 185                 190

Ala Ala Ser Leu Ser Asp Ile Pro Lys Ala Ala Asp Leu Gly Ser Trp
            195                 200                 205

Xaa Gln Val Arg Pro Gln Glu Leu Ser Arg Val Gln Glu Leu Ala Pro
210                 215                 220
```

```
Ala Ser Gly Glu Lys Gly Gln Ala Glu Arg Gly Pro Trp Arg Gln Lys
225             230             235             240

Glu Ser Glu His Ala Ser Leu Tyr Pro Gly Arg Cys Thr Gln Gly His
                245             250             255

Ser Cys Ala Ala Val Pro Gln His Gln Trp Glu Glu Gln Ala Val Gly
            260             265             270

Ala Leu Cys Gly Arg Arg Val Cys Thr Ser Val Pro Arg Val Gln Cys
        275             280             285

Cys Ser Pro Pro Arg Arg Pro Cys Arg Ser Ile Lys Gly Ala Trp Leu
    290             295             300

Cys Cys Leu Gln Ser Arg Thr Thr Arg Leu Thr Arg Pro Ser Thr Thr
305             310             315             320

Thr Phe Leu Ser Cys Ser Pro Pro Ala Ala Pro Leu His Pro Ser Thr
        325             330             335

Met Gly Ser Arg Ser Pro Pro Leu Gln Gly Arg Ala Pro Gln Pro Arg
        340             345             350

Ser Trp Thr Gly Thr Arg Arg Arg Arg Lys Arg Arg Met Met Lys Met
        355             360             365

Glu Lys Met Arg Arg Lys Ser Pro Ser Ala Ser Gly Lys Gly Ser Arg
370             375             380

Pro Phe Leu Lys Leu Thr Arg Asn Thr
385             390
```

```
<210> 1579
<211> 39
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<400> 1579
Gln Ala Xaa Thr Thr Leu Thr Lys Gly Xaa Lys Ser Trp Ser Ser Thr
1   5   10   15

Ala Val Ala Ala Ala Leu Glu Leu Val Asp Pro Pro Gly Cys Arg Asn
            20   25   30

Ser Ala Arg Gly Arg Arg Asn
            35

<210> 1580
<211> 286
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (171)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (237)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1580
Pro Thr Arg Pro Pro Thr Arg Pro Pro Thr Arg Pro Val Pro Ala Ser
1   5   10   15

Glu Ser Ala Val Val Val Gln Thr Glu Cys Ser Leu Leu Phe Val Trp
            20   25   30

Leu Arg Phe His Ala Arg Arg Trp Leu Arg Met Ser Ser Ser His Phe
            35   40   45

Ala Ser Arg His Arg Lys Asp Ile Ser Thr Glu Met Ile Arg Thr Lys
        50   55   60

Ile Ala His Arg Lys Ser Leu Ser Gln Lys Glu Asn Arg His Lys Glu
65   70   75   80

Tyr Glu Arg Asn Arg His Phe Gly Leu Lys Asp Val Asn Ile Pro Thr
                85   90   95

Leu Glu Gly Arg Ile Leu Val Glu Leu Asp Glu Thr Ser Gln Gly Leu
            100   105   110

Val Pro Glu Lys Thr Asn Val Lys Pro Arg Ala Met Lys Thr Ile Leu
            115   120   125

```
Gly Asp Gln Arg Lys Gln Met Leu Gln Lys Tyr Lys Glu Glu Lys Gln
    130             135             140

Leu Gln Lys Leu Lys Glu Gln Arg Glu Lys Ala Lys Arg Gly Ile Phe
145             150             155             160

Lys Val Gly Arg Tyr Arg Pro Asp Met Pro Xaa Phe Leu Leu Ser Asn
            165             170             175

Gln Asn Ala Val Lys Ala Glu Pro Lys Lys Ala Ile Pro Ser Ser Val
            180             185             190

Arg Ile Thr Arg Ser Lys Ala Lys Asp Gln Met Glu Gln Thr Lys Ile
        195             200             205

Asp Asn Glu Ser Asp Val Arg Ala Ile Arg Pro Gly Pro Arg Gln Thr
    210             215             220

Ser Glu Lys Lys Val Ser Asp Lys Glu Lys Lys Val Xaa Gln Pro Val
225             230             235             240

Met Pro Thr Ser Leu Arg Met Thr Arg Ser Ala Thr Gln Ala Ala Lys
            245             250             255

Gln Val Pro Arg Thr Val Ser Ser Thr Thr Ala Arg Lys Pro Val Thr
            260             ·265            270

Arg Ala Ala Asn Glu Asn Gly Thr Arg Arg Lys Gly Ala Lys
    275             280             285
```

```
<210> 1581
<211> 276
<212> PRT
<213> Homo sapiens

<400> 1581
Asp Arg Arg Gly Ile Gly Ile Met Ala Ala Ala Leu Phe Val Leu Leu
1           5               10              15

Gly Phe Ala Leu Leu Gly Thr His Gly Ala Ser Gly Ala Ala Gly Thr
        20              25              30

Val Phe Thr Thr Val Glu Asp Leu Gly Ser Lys Ile Leu Leu Thr Cys
        35              40              45

Ser Leu Asn Asp Ser Ala Thr Glu Val Thr Gly His Arg Trp Leu Lys
    50              55              60
```

```
Gly Gly Val Val Leu Lys Glu Asp Ala Leu Pro Gly Gln Lys Thr Glu
 65              70              75              80

Phe Lys Val Asp Ser Asp Asp Gln Trp Gly Glu Tyr Ser Cys Val Phe
            85              90              95

Leu Pro Glu Pro Met Gly Thr Ala Asn Ile Gln Leu His Gly Pro Pro
            100             105             110

Arg Val Lys Ala Val Lys Ser Ser Glu His Ile Asn Glu Gly Glu Thr
        115             120             125

Ala Met Leu Val Cys Lys Ser Glu Ser Val Pro Pro Val Thr Asp Trp
    130             135             140

Ala Trp Tyr Lys Ile Thr Asp Ser Glu Asp Lys Ala Leu Met Asn Gly
145             150             155             160

Ser Glu Ser Arg Phe Phe Val Ser Ser Ser Gln Gly Arg Ser Glu Leu
            165             170             175

His Ile Glu Asn Leu Asn Met Glu Ala Asp Pro Gly Gln Tyr Arg Cys
            180             185             190

Asn Gly Thr Ser Ser Lys Gly Ser Asp Gln Ala Ile Ile Thr Leu Arg
        195             200             205

Val Arg Ser His Leu Ala Ala Leu Trp Pro Phe Leu Gly Ile Val Ala
    210             215             220

Glu Val Leu Val Leu Val Thr Ile Ile Phe Ile Tyr Glu Lys Arg Arg
225             230             235             240

Lys Pro Glu Asp Val Leu Asp Asp Asp Asp Ala Gly Ser Ala Pro Leu
            245             250             255

Lys Ser Ser Gly Gln His Gln Asn Asp Lys Gly Lys Asn Val Arg Gln
            260             265             270

Arg Asn Ser Ser
        275
```

```
<210> 1582
<211> 476
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
```

```
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (136)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (271)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1582
Thr Ile Ser Phe Pro Gly Arg Xaa Leu Asp Lys Phe Ile Lys Phe Phe
  1               5               10                    15

Ala Leu Lys Thr Val Gln Val Ile Val Gln Ala Arg Leu Gly Glu Lys
             20              25                 30

Ile Cys Thr Arg Ser Ser Ser Ser Pro Thr Gly Ser Asp Trp Phe Asn
         35              40                 45

Leu Ala Ile Lys Asp Ile Pro Glu Val Thr His Glu Ala Lys Lys Ala
     50              55              60

Leu Ala Gly Gln Leu Pro Ala Val Gly Arg Ser Met Cys Val Glu Ile
 65              70              75                       80

Ser Leu Lys Thr Ser Glu Gly Asp Ser Met Glu Leu Glu Ile Trp Cys
             85              90                 95

Leu Glu Met Asn Glu Lys Cys Asp Lys Glu Ile Lys Val Ser Tyr Thr
             100             105             110

Val Tyr Asn Arg Leu Ser Leu Leu Leu Lys Ser Leu Leu Ala Ile Thr
         115             120             125

Arg Val Thr Pro Ala Tyr Arg Xaa Ser Arg Lys Gln Gly His Glu Tyr
     130             135             140

Val Ile Leu Tyr Arg Ile Tyr Phe Gly Glu Val Gln Leu Ser Gly Leu
145             150             155             160

Gly Glu Gly Phe Gln Thr Val Arg Val Gly Thr Val Gly Thr Pro Val
             165             170             175

Gly Thr Ile Thr Leu Ser Cys Ala Tyr Arg Ile Asn Leu Ala Phe Met
             180             185             190

Ser Thr Arg Gln Phe Glu Arg Thr Pro Pro Ile Met Gly Ile Ile Ile
```

```
              195                    200                    205

    Asp His Phe Val Asp Arg Pro Tyr Pro Ser Ser Ser Pro Met His Pro
    210       .               215               220

    Cys Asn Tyr Arg Thr Ala Gly Glu Asp Thr Gly Val Ile Tyr Pro Ser
    225               230               235               240

    Val Glu Asp Ser Gln Glu Val Cys Thr Thr Ser Phe Ser Thr Ser Pro
                      245               250               255

    Pro Ser Gln Leu Met Val Pro Gly Lys Glu Gly Gly Val Pro Xaa Ala
                  260               265               270

    Pro Asn Gln Pro Val His Gly Thr Gln Ala Asp Gln Glu Arg Leu Ala
                  275               280               285

    Thr Cys Thr Pro Ser Asp Arg Thr His Cys Ala Ala Thr Pro Ser Ser
        290               295               300

    Ser Glu Asp Thr Glu Thr Val Ser Asn Ser Ser Glu Gly Arg Ala Ser
    305               310               315               320

    Pro His Asp Val Leu Glu Thr Ile Phe Val Arg Lys Val Gly Ala Phe
                  325               330               335

    Val Asn Lys Pro Ile Asn Gln Val Thr Leu Thr Ser Leu Asp Ile Pro
                  340               345               350

    Phe Ala Met Phe Ala Pro Lys Asn Leu Glu Leu Glu Asp Thr Asp Pro
                  355               360               365

    Met Val Asn Pro Pro Asp Ser Pro Glu Thr Glu Ser Pro Leu Gln Gly
        370               375               380

    Ser Leu His Ser Asp Gly Ser Ser Gly Gly Ser Ser Gly Asn Thr His
    385               390               395               400

    Asp Asp Phe Val Met Ile Asp Phe Lys Pro Ala Phe Ser Lys Asp Asp
                  405               410               415

    Ile Leu Pro Met Asp Leu Gly Thr Phe Tyr Arg Glu Phe Gln Asn Pro
                  420               425               430

    Pro Gln Leu Ser Ser Leu Ser Ile Asp Ile Gly Ala Gln Ser Met Ala
              435               440               445

    Glu Asp Leu Asp Ser Leu Pro Glu Lys Leu Ala Val His Glu Lys Asn
    450               455               460

    Val Arg Glu Phe Asp Ala Phe Val Glu Thr Leu Gln
```

```
            465                     470                     475


        <210> 1583
        <211> 569
        <212> PRT
        <213> Homo sapiens

        <220>
        <221> SITE
        <222> (2)
        <223> Xaa equals any of the naturally occurring L-amino acids

        <220>
        <221> SITE
        <222> (34)
        <223> Xaa equals any of the naturally occurring L-amino acids

        <220>
        <221> SITE
        <222> (188)
        <223> Xaa equals any of the naturally occurring L-amino acids

        <220>
        <221> SITE
        <222> (291)
        <223> Xaa equals any of the naturally occurring L-amino acids

        <220>
        <221> SITE
        <222> (345)
        <223> Xaa equals any of the naturally occurring L-amino acids

        <220>
        <221> SITE
        <222> (346)
        <223> Xaa equals any of the naturally occurring L-amino acids

        <220>
        <221> SITE
        <222> (552)
        <223> Xaa equals any of the naturally occurring L-amino acids

        <220>
        <221> SITE
        <222> (553)
        <223> Xaa equals any of the naturally occurring L-amino acids

        <220>
        <221> SITE
```

<222> (554)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1583

```
Gly Xaa Lys Ser Trp Cys Ser Thr Ala Val Ala Ala Ala Leu Glu Leu
 1               5                 10              15

Val Asp Pro Pro Gly Cys Arg Asn Ser Ala Arg Val Leu Ala Val Val
            20                  25              30

Ala Xaa Val Leu Lys Leu Gly Asn Ile Glu Phe Lys Pro Glu Ser Arg
        35              40              45

Val Asn Gly Leu Asp Glu Ser Lys Ile Lys Asp Lys Asn Glu Leu Lys
    50              55              60

Glu Ile Cys Glu Leu Thr Gly Ile Asp Gln Ser Val Leu Glu Arg Ala
65              70              75              80

Phe Ser Phe Arg Thr Val Glu Ala Lys Gln Glu Lys Val Ser Thr Thr
                85              90              95

Leu Asn Val Ala Gln Ala Tyr Tyr Ala Arg Asp Ala Leu Ala Lys Asn
            100             105             110

Leu Tyr Ser Arg Leu Phe Ser Trp Leu Val Asn Arg Ile Asn Glu Ser
        115             120             125

Ile Lys Ala Gln Thr Lys Val Arg Lys Lys Val Met Gly Val Leu Asp
    130             135             140

Ile Tyr Gly Phe Glu Ile Phe Glu Asp Asn Ser Phe Glu Gln Phe Ile
145             150             155             160

Ile Asn Tyr Cys Asn Glu Lys Leu Gln Gln Ile Phe Ile Glu Leu Thr
            165             170             175

Leu Lys Glu Glu Gln Glu Glu Tyr Ile Arg Glu Xaa Ile Glu Trp Thr
        180             185             190

His Ile Asp Tyr Phe Asn Asn Ala Ile Ile Cys Asp Leu Ile Glu Asn
        195             200             205

Asn Thr Asn Gly Ile Leu Ala Met Leu Asp Glu Glu Cys Leu Arg Pro
    210             215             220

Gly Thr Val Thr Asp Glu Thr Phe Leu Glu Lys Leu Asn Gln Val Cys
225             230             235             240

Ala Thr His Gln His Phe Glu Ser Arg Met Ser Lys Cys Ser Arg Phe
            245             250             255
```

Leu Asn Asp Thr Ser Leu Pro His Ser Cys Phe Arg Ile Gln His Tyr
        260   265   270

Ala Gly Lys Val Leu Tyr Gln Val Glu Gly Phe Val Asp Lys Asn Asn
        275   280   285

Asp Leu Xaa Tyr Arg Asp Leu Ser Gln Ala Met Trp Lys Ala Ser His
290   295   300

Ala Leu Ile Lys Ser Leu Phe Pro Glu Gly Asn Pro Ala Lys Ile Asn
305   310   315   320

Leu Lys Arg Pro Pro Thr Ala Gly Ser Gln Phe Lys Ala Ser Val Ala
            325   330   335

Thr Leu Met Lys Asn Leu Gln Thr Xaa Xaa Pro Asn Tyr Ile Arg Cys
        340   345   350

Ile Lys Pro Asn Asp Lys Lys Ala Ala His Ile Phe Asn Glu Ala Leu
        355   360   365

Val Cys His Gln Ile Arg Tyr Leu Gly Leu Leu Glu Asn Val Arg Val
    370   375   380

Arg Arg Ala Gly Tyr Ala Phe Arg Gln Ala Tyr Glu Pro Cys Leu Glu
385   390   395   400

Arg Tyr Lys Met Leu Cys Lys Gln Thr Trp Pro His Trp Lys Gly Pro
            405   410   415

Ala Arg Ser Gly Val Glu Val Leu Phe Asn Glu Leu Glu Ile Pro Val
            420   425   430

Glu Glu Tyr Ser Phe Gly Arg Ser Lys Ile Phe Ile Arg Asn Pro Arg
        435   440   445

Thr Leu Phe Lys Leu Glu Asp Leu Arg Lys Gln Arg Leu Glu Asp Leu
    450   455   460

Ala Thr Leu Ile Gln Lys Ile Tyr Arg Gly Trp Lys Cys Arg Thr His
465   470   475   480

Phe Leu Leu Met Lys Lys Ser Gln Ile Val Ile Ala Ala Trp Tyr Arg
            485   490   495

Arg Tyr Ala Gln Gln Lys Arg Tyr Gln Gln Thr Lys Ser Ser Ala Leu
        500   505   510

Val Ile Gln Ser Tyr Ile Arg Gly Trp Lys Ala Arg Lys Ile Leu Arg
        515   520   525

```
Glu Leu Lys His Gln Lys Arg Cys Lys Glu Ala Val Thr Thr Ile Ala
    530             535             540

Ala Tyr Trp His Gly Thr Gln Xaa Xaa Xaa Lys Asn Gln Glu Ile Leu
545             550             555             560

Gln Ser Gln Cys Trp Lys Arg Lys Ser
                565
```

```
<210> 1584
<211> 267
<212> PRT
<213> Homo sapiens

<400> 1584
Arg Val Asp Pro Arg Val Arg Ile Leu Gly Ala Gly Glu Glu Ala Gly
    1           5               10              15

Ser Pro Ser Leu His Val Arg Asp Leu Thr Val Glu Met Ala Ala Gln
            20              25              30

Lys Ile Asn Glu Gly Leu Glu His Leu Ala Lys Ala Glu Lys Tyr Leu
        35              40              45

Lys Thr Gly Phe Leu Lys Trp Lys Pro Asp Tyr Asp Ser Ala Ala Ser
    50              55              60

Glu Tyr Gly Lys Ala Ala Val Ala Phe Lys Asn Ala Lys Gln Phe Glu
65              70              75              80

Gln Ala Lys Asp Ala Cys Leu Arg Glu Ala Val Ala His Glu Asn Asn
            85              90              95

Arg Ala Leu Phe His Ala Ala Lys Ala Tyr Glu Gln Ala Gly Met Met
            100             105             110

Leu Lys Glu Met Gln Lys Leu Pro Glu Ala Val Gln Leu Ile Glu Lys
        115             120             125

Ala Ser Met Met Tyr Leu Glu Asn Gly Thr Pro Asp Thr Ala Ala Met
        130             135             140

Ala Leu Glu Arg Ala Gly Lys Leu Ile Glu Asn Val Asp Pro Glu Lys
145             150             155             160

Ala Val Gln Leu Tyr Gln Gln Thr Ala Asn Val Phe Glu Asn Glu Glu
                165             170             175
```

```
Arg Leu Arg Gln Ala Val Glu Leu Leu Gly Lys Ala Ser Arg Leu Leu
            180                 185             190

Val Arg Gly Arg Arg Phe Asp Glu Ala Ala Leu Ser Ile Gln Lys Glu
            195                 200             205

Lys Asn Ile Tyr Lys Glu Ile Glu Asn Tyr Pro Thr Cys Tyr Lys Lys
        210                 215             220

Thr Ile Ala Gln Val Leu Val His Leu His Arg Asn Asp Tyr Val Ala
225                 230             235                 240

Ala Glu Arg Cys Val Arg Glu Ser Tyr Ser Ile Pro Gly Phe Asn Gly
                245             250                 255

Ser Glu Asp Cys Ala Ala Leu Gly Thr Ala Ser
            260             265
```

```
<210> 1585
<211> 214
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1585
Xaa Xaa Xaa Gln Thr Ser Pro Val Leu Cys Asn Xaa Pro Arg Arg His
  1           5                 10                  15

Arg Ala Pro Trp Pro Ser Tyr Asn Asp Glu Asp Ile Tyr Leu Phe Asn
            20                  25                  30
```

```
Ser Ser His Ser Asp Gly Ala Gln Tyr Val Lys Arg Tyr Lys Gly His
        35              40              45

Arg Asn Asn Ala Thr Val Lys Gly Val Asn Phe Tyr Gly Pro Lys Ser
    50              55              60

Glu Phe Val Val Ser Gly Ser Asp Cys Gly His Ile Phe Leu Trp Glu
    65              70              75              80

Lys Ser Ser Cys Gln Ile Ile Gln Phe Met Glu Gly Asp Lys Gly Gly
                85              90              95

Val Val Asn Cys Leu Glu Pro His Pro His Leu Pro Val Leu Ala Thr
                100             105             110

Ser Gly Leu Asp His Asp Val Lys Ile Trp Ala Pro Thr Ala Glu Ala
            115             120             125

Ser Thr Glu Leu Thr Gly Leu Lys Asp Val Ile Lys Lys Asn Lys Arg
    130             135             140

Glu Arg Asp Glu Asp Ser Leu His Gln Thr Asp Leu Phe Asp Ser His
145             150             155             160

Met Leu Trp Phe Leu Met His His Leu Arg Gln Arg Arg His His Arg
            165             170             175

Arg Trp Arg Glu Pro Gly Val Gly Ala Thr Asp Ala Asp Ser Asp Glu
            180             185             190

Ser Pro Ser Ser Ser Asp Thr Ser Asp Glu Glu Glu Gly Pro Asp Arg
        195             200             205

Val Gln Cys Met Pro Ser
    210
```

```
<210> 1586
<211> 74
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1586
Gln Ile Thr Pro Asn Lys Xaa Gly His Arg Glu Ser Ala Arg Arg Pro
```

```
        1                5                        10                       15

    Val Ile Gln Gly Pro Phe Leu Leu Asp Val Lys Glu Ser Trp Val Lys
                20                  25                  30

    Cys Gly Cys Asn Leu Asn Gln Leu Val Leu Val Ile Cys Phe Cys Pro
                35                  40                  45

    Leu Cys Phe Leu Leu Ser Asn Ala Lys Cys Val Phe Cys Ser His Glu
            50                  55                  60

    Leu Lys His Lys Lys Met His Glu Thr Leu
    65                  70
```

```
<210> 1587
<211> 412
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (296)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1587
Ser Gly Thr His His Phe Ser Cys Val Leu Gly Ser Phe Arg Val Ser
1                5                  10                  15

Ala Met Phe Pro Arg Val Ser Thr Phe Leu Pro Leu Arg Pro Leu Ser
                20                  25                  30

Arg His Pro Leu Ser Ser Gly Ser Pro Glu Thr Ser Ala Ala Ala Ile
            35                  40                  45

Met Leu Leu Thr Val Arg His Gly Thr Val Arg Tyr Arg Ser Ser Ala
        50                  55                  60

Leu Leu Ala Arg Thr Lys Asn Asn Ile Gln Arg Tyr Phe Gly Thr Asn
65                  70                  75                  80

Ser Val Ile Cys Ser Lys Lys Asp Lys Gln Ser Val Arg Thr Glu Glu
                85                  90                  95

Thr Ser Lys Glu Thr Ser Glu Ser Gln Asp Ser Glu Lys Glu Asn Thr
                100                 105                 110

Lys Lys Asp Leu Leu Gly Ile Ile Lys Gly Met Lys Val Glu Leu Ser
                115                 120                 125
```

Thr Val Asn Val Arg Thr Thr Lys Pro Pro Lys Arg Arg Pro Leu Lys
130   135   140

Ser Leu Glu Ala Thr Leu Gly Arg Leu Arg Arg Ala Thr Glu Tyr Ala
145   150   155   160

Pro Lys Lys Arg Ile Glu Pro Leu Ser Pro Glu Leu Val Ala Ala Ala
                165   170   175

Ser Ala Val Ala Asp Ser Leu Pro Phe Asp Lys Gln Thr Thr Lys Ser
            180   185   190

Glu Leu Leu Ser Gln Leu Gln Gln His Glu Glu Glu Ser Arg Ala Gln
        195   200   205

Arg Asp Ala Lys Arg Pro Lys Ile Ser Phe Ser Asn Ile Ile Ser Asp
    210   215   220

Met Lys Val Ala Arg Ser Ala Thr Ala Arg Val Arg Ser Arg Pro Glu
225   230   235   240

Leu Arg Ile Gln Phe Asp Glu Gly Tyr Asp Asn Tyr Pro Gly Gln Glu
            245   250   255

Lys Thr Asp Asp Leu Lys Lys Arg Lys Asn Ile Phe Thr Gly Lys Arg
            260   265   270

Leu Asn Ile Phe Asp Met Met Ala Val Thr Lys Glu Ala Pro Glu Thr
        275   280   285

Asp Thr Ser Pro Ser Leu Trp Xaa Val Glu Phe Ala Lys Gln Leu Ala
    290   295   300

Thr Val Asn Glu Gln Pro Leu Gln Asn Gly Phe Glu Glu Leu Ile Gln
305   310   315   320

Trp Thr Lys Glu Gly Lys Leu Trp Glu Phe Pro Ile Asn Asn Glu Ala
            325   330   335

Gly Phe Asp Asp Asp Gly Ser Glu Phe His Glu His Ile Phe Leu Glu
            340   345   350

Lys His Leu Glu Ser Phe Pro Lys Gln Gly Pro Ile Arg His Phe Met
        355   360   365

Glu Leu Val Thr Cys Gly Leu Ser Lys Asn Pro Tyr Leu Ser Val Lys
370   375   380

Gln Lys Val Glu His Ile Glu Trp Phe Arg Asn Tyr Phe Asn Glu Lys
385   390   395   400

Lys Asp Ile Leu Lys Glu Ser Asn Ile Gln Phe Asn
                405   410

<210> 1588
<211> 44
<212> PRT
<213> Homo sapiens

<400> 1588
Ala Ile His Ser Leu Gln Gln Phe Asp Lys Ile Tyr Phe Cys Glu Gln
 1   5   10   15

Lys Leu Arg His Leu His Phe Leu Pro Met Trp Ser Leu Gln Thr Trp
                20   25   30

Glu Thr Ile His Glu Tyr Leu Tyr Cys Met Val Ile
            35   40

<210> 1589
<211> 214
<212> PRT
<213> Homo sapiens

<400> 1589
Val Gly Glu Thr Gln His Ala Leu Arg Pro Leu Cys Lys Gln His Pro
 1   5   10   15

Val Pro Pro Ser Ser Pro Arg Pro Ser Glu Glu Met Val Lys Met Val
                20   25   30

Leu Ser Arg Pro Cys His Pro Asp Asp Gln Phe Thr Thr Ser Ile Leu
            35   40   45

Arg His Trp Cys Met Lys His Asp Glu Leu Leu Ala Glu His Ile Lys
        50   55   60

Ser Leu Leu Ile Lys Asn Asn Ser Leu Pro Arg Lys Arg Gln Ser Leu
65   70   75   80

Arg Ser Ser Ser Ser Lys Leu Ala Gln Leu Thr Leu Glu Gln Ile Leu
                85   90   95

Glu His Leu Asp Asn Leu Arg Leu Asn Leu Thr Asn Thr Lys Gln Asn
            100   105   110

Phe Phe Ser Gln Thr Pro Ile Leu Gln Ala Leu Gln His Val Gln Ala
            115   120   125

```
Ser Cys Asp Glu Ala His Lys Met Lys Phe Ser Asp Leu Phe Ser Leu
    130                 135             140

Ala Glu Glu Tyr Glu Asp Ser Ser Thr Lys Pro Pro Lys Ser Arg Arg
145             150             155                     160

Lys Ala Ala Leu Ser Ser Pro Arg Ser Arg Lys Asn Ala Thr Gln Pro
            165             170                 175

Pro Asn Ala Glu Glu Glu Ser Gly Ser Ser Ser Ala Ser Glu Glu Glu
            180             185                 190

Asp Thr Lys Pro Lys Pro Thr Lys Arg Lys Arg Lys Gly Ser Ser Ala
        195         200             205

Val Gly Ser Asp Ser Asp
    210
```

```
<210> 1590
<211> 200
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1590
Lys Met His Ile Leu His Ala Asp Ile Lys Pro Asp Asn Ile Leu Val
  1             5               10                  15

Asn Glu Ser Lys Thr Ile Leu Lys Leu Cys Xaa Phe Gly Ser Ala Ser
            20              25                  30

His Val Ala Asp Asn Asp Ile Thr Pro Tyr Leu Val Ser Arg Phe Tyr
            35              40                  45

Arg Ala Pro Glu Ile Ile Ile Gly Lys Ser Tyr Asp Tyr Gly Ile Asp
        50              55              60

Met Trp Ser Val Gly Cys Thr Leu Tyr Glu Leu Tyr Thr Gly Lys Ile
 65             70              75                      80

Leu Phe Pro Gly Lys Thr Asn Asn His Met Leu Lys Leu Ala Met Asp
            85              90                  95

Leu Lys Gly Lys Met Pro Asn Lys Met Ile Arg Lys Gly Val Phe Lys
```

```
                    100                     105                     110

      Asp Gln His Phe Asp Gln Asn Leu Asn Phe Met Tyr Ile Glu Val Asp
              115                     120                     125

      Lys Val Thr Glu Arg Glu Lys Val Thr Val Met Ser Thr Ile Asn Pro
              130                     135                     140

      Thr Lys Asp Leu Leu Ala Asp Leu Ile Gly Cys Gln Arg Leu Pro Glu
      145                     150                     155                     160

      Asp Gln Arg Lys Lys Val His Gln Leu Lys Asp Leu Leu Asp Gln Ile
                      165                     170                     175

      Leu Met Leu Asp Pro Ala Lys Arg Ile Ser Ile Asn Gln Ala Leu Gln
                      180                     185                     190

      His Ala Phe Ile Gln Glu Lys Ile
              195                     200


      <210> 1591
      <211> 115
      <212> PRT
      <213> Homo sapiens

      <400> 1591
      Val Thr Leu Ala Arg Ser Leu Gln Ser Arg Pro Val Ala Met Ser Ala
        1                   5                      10                      15

      Asp Val Thr Ser Ser Leu Ala Ala Phe Gly Glu Gly Trp Gly Val Arg
                      20                      25                      30

      Glu Leu Ser Asp His Ser Ser Pro Arg Pro Leu Leu Gly Leu Ala Arg
                      35                      40                      45

      Arg Ala Pro Arg Val Asp Pro Pro Ala Thr Gly Val Phe Ser Pro Leu
              50                      55                      60

      Leu Pro Pro Ser Gly Leu Met Arg Gln Arg Gly Gly Cys Gly Ala Cys
      65                      70                      75                      80

      Leu Gly Arg Thr Glu Leu Ser Leu Gly Lys Thr Tyr Phe Val Asn Lys
                      85                      90                      95

      Trp Asn Thr Trp Leu Tyr Ser Lys Lys Lys Lys Lys Lys Lys Lys Lys
                      100                     105                     110

      Lys Ser Arg
              115
```

```
<210> 1592
<211> 66
<212> PRT
<213> Homo sapiens

<400> 1592
Val Cys Cys Cys Lys Lys Ser Pro Met Cys Ile Thr Asn Ser Glu Tyr
 1               5                  10                  15


Phe Leu Arg Leu Lys Lys Thr Gly Val Thr Ser Arg Tyr Cys Cys Val
                 20                  25                  30


Met Val Thr Leu Thr Lys Arg His Gln Pro Leu Arg Val Leu Tyr Cys
             35                  40                  45


Lys Ala Gln Ile Thr Phe Val Cys Tyr Thr Leu Ile Gly Glu Leu Lys
         50                  55                  60


Val Ile
 65




<210> 1593
<211> 91
<212> PRT
<213> Homo sapiens

<400> 1593
Glu Ser Leu Trp Ala Phe Cys Leu Ser Leu Leu Glu Arg Leu Ala Cys
 1               5                  10                  15


Cys Ser Leu Leu Tyr Pro Glu Val Cys Leu Trp Asp Phe Ser Pro Val
                 20                  25                  30


Ala Val Glu Thr Arg Arg Pro Thr Leu Phe Glu Thr Gln Met Leu Leu
             35                  40                  45


Ser Leu Ala Ser Pro Ser Leu Ser Ser Pro Asn Glu Pro Thr Phe Cys
         50                  55                  60


Thr Ser Thr Arg Met Pro Gly Arg Leu Gly Pro Gln Arg Leu Leu Phe
 65                  70                  75                  80


Gln Asn Leu Trp Lys Pro Arg Leu Asn Val Pro
                 85                  90
```

```
<210> 1594
<211> 442
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1594
Leu Glu Gln Glu Leu Gly Asp Gly Trp Gly His Ser Asp Leu His Lys
 1               5              10                 15

Ala Leu Leu Cys Arg Xaa Pro Pro Leu Pro Glu Pro Asp Ala Met Ser
             20              25              30

Ser Lys Gly Ser Val Val Leu Ala Tyr Ser Gly Gly Leu Asp Thr Ser
         35              40                  45

Cys Ile Leu Val Trp Leu Lys Glu Gln Gly Tyr Asp Val Ile Ala Tyr
     50              55                  60

Leu Ala Asn Ile Gly Gln Lys Glu Asp Phe Glu Glu Ala Arg Lys Lys
 65              70                  75                      80

Ala Leu Lys Leu Gly Ala Lys Lys Val Phe Ile Glu Asp Val Ser Arg
             85                  90                  95

Glu Phe Val Glu Glu Phe Ile Trp Pro Ala Ile Gln Ser Ser Ala Leu
             100             105             110

Tyr Glu Asp Arg Tyr Leu Leu Gly Thr Ser Leu Ala Arg Pro Cys Ile
         115             120                 125

Ala Arg Lys Gln Val Glu Ile Ala Gln Arg Glu Gly Ala Lys Tyr Val
     130             135                 140

Ser His Gly Ala Thr Gly Lys Gly Asn Asp Gln Val Arg Phe Glu Leu
145                 150                 155                 160

Ser Cys Tyr Ser Leu Ala Pro Gln Ile Lys Val Ile Ala Pro Trp Arg
             165             170                 175

Met Pro Glu Phe Tyr Asn Arg Phe Lys Gly Arg Asn Asp Leu Met Glu
             180             185                 190

Tyr Ala Lys Gln His Gly Ile Pro Ile Pro Val Thr Pro Lys Asn Pro
         195             200                 205
```

```
Trp Ser Met Asp Glu Asn Leu Met His Ile Ser Tyr Glu Ala Gly Ile
210                 215                 220

Leu Glu Asn Pro Lys Asn Gln Ala Pro Pro Gly Leu Tyr Thr Lys Thr
225             230                 235                 240

Gln Asp Pro Ala Lys Ala Pro Asn Thr Pro Asp Ile Leu Glu Ile Glu
                245             250                 255

Phe Lys Lys Gly Val Pro Val Lys Val Thr Asn Val Lys Asp Gly Thr
            260             265                 270

Thr His Gln Thr Ser Leu Glu Leu Phe Met Tyr Leu Asn Glu Val Ala
        275             280             285

Gly Lys His Gly Val Gly Arg Ile Asp Ile Val Glu Asn Arg Phe Ile
    290             295             300

Gly Met Lys Ser Arg Gly Ile Tyr Glu Thr Pro Ala Gly Thr Ile Leu
305             310             315             320

Tyr His Ala His Leu Asp Ile Glu Ala Phe Thr Met Asp Arg Glu Val
            325             330             335

Arg Lys Ile Lys Gln Gly Leu Gly Leu Lys Phe Ala Glu Leu Val Tyr
        340             345             350

Thr Gly Phe Trp His Ser Pro Glu Cys Glu Phe Val Arg His Cys Ile
    355             360             365

Ala Lys Ser Gln Glu Arg Val Glu Gly Lys Val Gln Val Ser Val Leu
    370             375             380

Lys Gly Gln Val Tyr Ile Leu Gly Arg Glu Ser Pro Leu Ser Leu Tyr
385             390             395             400

Asn Glu Glu Leu Val Ser Met Asn Val Gln Gly Asp Tyr Glu Pro Thr
            405             410             415

Asp Ala Thr Gly Phe Ile Asn Ile Asn Ser Leu Arg Leu Lys Glu Tyr
            420             425             430

His Arg Leu Gln Ser Lys Val Thr Ala Lys
        435             440
```

<210> 1595
<211> 456
<212> PRT
<213> Homo sapiens

<400> 1595

```
Phe Gly Thr Ser Gln Phe Leu Leu Pro Leu Pro Ala Lys Met Ser Asp
 1               5                  10                  15

Met Glu Asp Asp Phe Met Cys Asp Asp Glu Glu Asp Tyr Asp Leu Glu
            20                  25                  30

Tyr Ser Glu Asp Ser Asn Ser Glu Pro Asn Val Asp Leu Glu Asn Gln
            35                  40                  45

Tyr Tyr Asn Ser Lys Ala Leu Lys Glu Asp Asp Pro Lys Ala Ala Leu
        50                  55                  60

Ser Ser Phe Gln Lys Val Leu Glu Leu Glu Gly Glu Lys Gly Glu Trp
 65                  70                  75                  80

Gly Phe Lys Ala Leu Lys Gln Met Ile Lys Ile Asn Phe Lys Leu Thr
                85                  90                  95

Asn Phe Pro Glu Met Met Asn Arg Tyr Lys Gln Leu Leu Thr Tyr Ile
            100                 105                 110

Arg Ser Ala Val Thr Arg Asn Tyr Ser Glu Lys Ser Ile Asn Ser Ile
        115                 120                 125

Leu Asp Tyr Ile Ser Thr Ser Lys Gln Met Asp Leu Leu Gln Glu Phe
    130                 135                 140

Tyr Glu Thr Thr Leu Glu Ala Leu Lys Asp Ala Lys Asn Asp Arg Leu
145                 150                 155                 160

Trp Phe Lys Thr Asn Thr Lys Leu Gly Lys Leu Tyr Leu Glu Arg Glu
                165                 170                 175

Glu Tyr Gly Lys Leu Gln Lys Ile Leu Arg Gln Leu His Gln Ser Cys
            180                 185                 190

Gln Thr Asp Asp Gly Glu Asp Asp Leu Lys Lys Gly Thr Gln Leu Leu
        195                 200                 205

Glu Ile Tyr Ala Leu Glu Ile Gln Met Tyr Thr Ala Gln Lys Asn Asn
    210                 215                 220

Lys Lys Leu Lys Ala Leu Tyr Glu Gln Ser Leu His Ile Lys Ser Ala
225                 230                 235                 240

Ile Pro His Pro Leu Ile Met Gly Val Ile Arg Glu Cys Gly Gly Lys
                245                 250                 255

Met His Leu Arg Glu Gly Glu Phe Glu Lys Ala His Thr Asp Phe Phe
```

```
                    260                         265                         270

    Glu Ala Phe Lys Asn Tyr Asp Glu Ser Gly Ser Pro Arg Arg Thr Thr
            275         .           280                 285

    Cys Leu Lys Tyr Leu Val Leu Ala Asn Met Leu Met Lys Ser Gly Ile
            290             295                 300

    Asn Pro Phe Asp Ser Gln Glu Ala Lys Pro Tyr Lys Asn Asp Pro Glu
    305             310                 315                 320

    Ile Leu Ala Met Thr Asn Leu Val Ser Ala Tyr Gln Asn Asn Asp Ile
                    325                 330                 335

    Thr Glu Phe Glu Lys Ile Leu Lys Thr Asn His Ser Asn Ile Met Asp
                    340                 345                 350

    Asp Pro Phe Ile Arg Glu His Ile Glu Glu Leu Leu Arg Asn Ile Arg
                355                 360                 365

    Thr Gln Val Leu Ile Lys Leu Ile Lys Pro Tyr Thr Arg Ile His Ile
        370                 375                 380

    Pro Phe Ile Ser Lys Glu Leu Asn Ile Asp Val Ala Asp Val Glu Ser
    385                 390                 395                 400

    Leu Leu Val Gln Cys Ile Leu Asp Asn Thr Ile His Gly Arg Ile Asp
                    405                 410                 415

    Gln Val Asn Gln Leu Leu Glu Leu Asp His Gln Lys Arg Gly Gly Ala
                    420                 425                 430

    Arg Tyr Thr Ala Leu Asp Lys Trp Thr Asn Gln Leu Asn Ser Leu Asn
            435                 440                 445

    Gln Ala Val Val Ser Lys Leu Ala
        450                 455
```

```
<210> 1596
<211> 375
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (176)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1596
```

```
Ser Phe Gly Glu Arg Ala Pro Ser Thr Arg Ser Gly Asp Pro Leu Val
 1               5               10              15

Ala Val Leu Pro Thr Arg Thr Arg Val Pro Gln Ala Ser Arg Cys Pro
             20              25              30

Ala Gly Ser Ser Cys Pro Thr Pro Gly Ala Arg Pro Pro Ala Ser Pro
         35              40              45

Gly Pro Leu Pro Arg Pro Ser Ser Arg Arg Ala Arg Ser Met Ala Pro
     50              55              60

Pro Gln Val Leu Ala Phe Gly Leu Leu Leu Ala Ala Ala Thr Ala Thr
 65              70              75              80

Phe Ala Ala Ala Gln Glu Glu Cys Val Cys Glu Asn Tyr Lys Leu Ala
             85              90              95

Val Asn Cys Phe Val Asn Asn Asn Arg Gln Cys Gln Cys Thr Ser Val
             100             105             110

Gly Ala Gln Asn Thr Val Ile Cys Ser Lys Leu Ala Ala Lys Cys Leu
         115             120             125

Val Met Lys Ala Glu Met Asn Gly Ser Lys Leu Gly Arg Arg Ala Lys
     130             135             140

Pro Glu Gly Ala Leu Gln Asn Asn Asp Gly Leu Tyr Asp Pro Asp Cys
145             150             155             160

Asp Glu Ser Gly Leu Phe Lys Ala Lys Gln Cys Asn Gly Thr Ser Xaa
             165             170             175

Cys Trp Cys Val Asn Thr Ala Gly Val Arg Arg Thr Asp Lys Asp Thr
             180             185             190

Glu Ile Thr Cys Ser Glu Arg Val Arg Thr Tyr Trp Ile Ile Ile Glu
             195             200             205

Leu Lys His Lys Ala Arg Glu Lys Pro Tyr Asp Ser Lys Ser Leu Arg
     210             215             220

Thr Ala Leu Gln Lys Glu Ile Thr Thr Arg Tyr Gln Leu Asp Pro Lys
225             230             235             240

Phe Ile Thr Ser Ile Leu Tyr Glu Asn Asn Val Ile Thr Ile Asp Leu
             245             250             255

Val Gln Asn Ser Ser Gln Lys Thr Gln Asn Asp Val Asp Ile Ala Asp
             260             265             270
```

```
Val Ala Tyr Tyr Phe Glu Lys Asp Val Lys Gly Glu Ser Leu Phe His
        275                 280                 285

Ser Lys Lys Met Asp Leu Thr Val Asn Gly Glu Gln Leu Asp Leu Asp
    290                 295                 300

Pro Gly Gln Thr Leu Ile Tyr Tyr Val Asp Glu Lys Ala Pro Glu Phe
305                 310                 315                 320

Ser Met Gln Gly Leu Lys Ala Gly Val Ile Ala Val Ile Val Val Val
                325                 330                 335

Val Ile Ala Val Val Ala Gly Ile Val Val Leu Val Ile Ser Arg Lys
                340                 345                 350

Lys Arg Met Ala Lys Tyr Glu Lys Ala Glu Ile Lys Glu Met Gly Glu
        355                 360                 365

Met His Arg Glu Leu Asn Ala
        370             375
```

```
<210> 1597
<211> 83
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (71)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1597
Ala Leu Gly Pro Gln Ala Ser Pro Leu Gln Ser Leu Ala Ala Ser Leu
  1               5                  10                  15

Asp Ala Glu Pro Ser Ser Ala Ala Val Pro Asp Gly Phe Pro Ala Gly
                20                  25                  30

Pro Thr Val Ser Pro Arg Arg Leu Ala Arg Pro Pro Gly Leu Glu Glu
                35                  40                  45

Ala Leu Ser Ala Leu Gly Leu Gln Gly Glu Arg Asp Thr Pro Gly Thr
    50                  55                  60

Ser Ser Pro Lys Ser Trp Xaa Gly Ser Arg Glu Arg Gln Lys His Ser
65                  70                  75                  80

Val Gly Glu
```

```
<210> 1598
<211> 103
<212> PRT
<213> Homo sapiens

<400> 1598
Gln Pro Glu Val Pro Asp Arg Arg Cys Val Ile His Arg Arg Arg Arg
 1               5                  10                  15


Tyr Gly Ser Ser Thr Glu Ala His Ala Lys Leu Ser Thr Met Ala Ser
                20                  25                  30


Ser Thr Val Pro Val Ser Ala Ala Gly Ser Ala Asn Glu Thr Pro Glu
                35                  40                  45


Ile Pro Asp Asn Val Gly Asp Trp Leu Arg Gly Val Tyr Arg Phe Ala
        50                  55                  60


Thr Asp Arg Asn Asp Phe Arg Arg Asn Leu Ile Leu Asn Leu Gly Leu
65                  70                  75                  80


Phe Ala Ala Gly Val Trp Leu Ala Arg Asn Leu Ser Asp Ile Asp Leu
                85                  90                  95


Met Ala Pro Gln Pro Gly Val
                100
```

```
<210> 1599
<211> 154
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (125)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (135)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1599
Arg Arg Thr Tyr Tyr Gly Lys Thr Trp Asn Cys Arg Ala Arg Tyr Leu
 1               5                  10                  15
```

```
Val Arg Asn Ser Arg Val Asp Pro Arg Val Arg Ala Asp Trp Gly Gly
             20              25              30

Gly Gly Leu Ala Arg Pro Gly Leu Ala Cys Gln Gly Ala Gly Gly Gly
         35              40              45

Gly Ser Ser Thr Met Ser Leu Gln Tyr Gly Ala Glu Glu Thr Pro Leu
     50              55              60

Ala Gly Ser Tyr Gly Ala Ala Asp Ser Phe Pro Lys Asp Phe Gly Tyr
 65              70              75              80

Gly Val Glu Glu Glu Glu Glu Glu Ala Ala Ala Ala Gly Gly Gly Val
             85              90              95

Gly Ala Gly Ala Gly Gly Gly Cys Gly Pro Gly Gly Ala Asp Ser Ser
         100             105             110

Lys Pro Arg Ile Leu Leu Met Gly Thr Pro Ala Gln Xaa Lys Phe Leu
         115             120             125

His Pro Glu Ser Gly Val Xaa Ile Lys Met Phe Asn Gln Arg Asp Pro
     130             135             140

Leu Phe Leu Gly Asn Tyr Gln Thr Arg Phe
145             150
```

<210> 1600
<211> 108
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1600
Gly Cys Ser Phe Lys Trp Gly Leu Thr Gly Asn Val Thr Leu Ser Arg

```
    1               5                   10                  15
Asp Val Arg Glu Val Asp Pro Xaa Gln Gly Xaa Pro Gly Arg Gly Thr
            20                  25                  30

Gly Cys Ala Leu Pro Gln Ser Glu Asn Leu Leu Tyr Val Val Arg Lys
            35                  40                  45

Glu Gln Gly Asp Gln Ala Glu Ser Trp Ala Gly Val Glu Trp Lys Glu
        50                  55                  60

Arg Arg Leu Xaa Arg Thr Gly Gly Gly Gly Pro Trp Leu Leu Leu Ser
65                  70                  75                  80

Glu Met Gly Thr Thr Gly Gly Phe Glu Gln Arg Ser Ala Leu Ile Asp
                85                  90                  95

Leu Tyr Phe Ala Arg Val Ile Leu Ala Ala Ile Leu
            100                 105
```

```
<210> 1601
<211> 253
<212> PRT
<213> Homo sapiens

<400> 1601
Ala Pro Arg Ser Pro Arg Gly Arg Cys Gly Gly Thr Arg Ala Glu Ala
    1               5                   10                  15

Ala Ala Ala Thr Trp Ala Ala Ala Gly Pro Arg Arg Arg Ala Val Arg
            20                  25                  30

Met Ser Gly Trp Ala Asp Glu Arg Gly Gly Glu Gly Asp Gly Arg Ile
            35                  40                  45

Tyr Val Gly Asn Leu Pro Thr Asp Val Arg Glu Lys Asp Leu Glu Asp
        50                  55                  60

Leu Phe Tyr Lys Tyr Gly Arg Ile Arg Glu Ile Glu Leu Lys Asn Arg
65                  70                  75                  80

His Gly Leu Val Pro Phe Ala Phe Val Arg Phe Glu Asp Pro Arg Asp
                85                  90                  95

Ala Glu Asp Ala Ile Tyr Gly Arg Asn Gly Tyr Asp Tyr Gly Gln Cys
            100                 105                 110

Arg Leu Arg Val Glu Phe Pro Arg Thr Tyr Gly Gly Arg Gly Gly Trp
            115                 120                 125
```

```
Pro Arg Gly Gly Arg Asn Gly Pro Pro Thr Arg Arg Ser Asp Phe Arg
    130             135         140
```

```
Val Leu Val Ser Gly Leu Pro Pro Ser Gly Ser Trp Gln Asp Leu Lys
145             150         155             160
```

```
Asp His Met Arg Glu Ala Gly Asp Val Cys Tyr Ala Asp Val Gln Lys
            165         170             175
```

```
Asp Gly Val Gly Met Val Glu Tyr Leu Arg Lys Glu Asp Met Glu Tyr
        180             185             190
```

```
Ala Leu Arg Lys Leu Asp Asp Thr Lys Phe Arg Ser His Glu Gly Glu
        195         200             205
```

```
Thr Ser Tyr Ile Arg Val Tyr Pro Glu Arg Ser Thr Ser Tyr Gly Tyr
    210             215             220
```

```
Ser Arg Ser Arg Ser Gly Ser Arg Gly Arg Asp Ser Pro Tyr Gln Ser
225             230             235             240
```

```
Arg Gly Ser Pro His Tyr Phe Ser Pro Phe Arg Pro Tyr
            245             250
```

```
<210> 1602
<211> 310
<212> PRT
<213> Homo sapiens

<400> 1602
Pro Arg Ala Ala Arg Pro Pro Ala Met Glu Pro Gly Pro Asp Gly Pro
  1          .  5             10             15
```

```
Ala Ala Ser Gly Pro Ala Ala Ile Arg Glu Gly Trp Phe Arg Glu Thr
            20             25             30
```

```
Cys Ser Leu Trp Pro Gly Gln Ala Leu Ser Leu Gln Val Glu Gln Leu
            35             40             45
```

```
Leu His His Arg Arg Ser Arg Tyr Gln Asp Ile Leu Val Phe Arg Ser
        50             55             60
```

```
Lys Thr Tyr Gly Asn Val Leu Val Leu Asp Gly Val Ile Gln Cys Thr
65             70             75             80
```

```
Glu Arg Asp Glu Phe Ser Tyr Gln Glu Met Ile Ala Asn Leu Pro Leu
            85             90             95
```

```
Cys Ser His Pro Asn Pro Arg Lys Val Leu Ile Ile Gly Gly Gly Asp
            100         105             110

Gly Gly Val Leu Arg Glu Val Val Lys His Pro Ser Val Glu Ser Val
            115         120             125

Val Gln Cys Glu Ile Asp Glu Asp Val Ile Gln Val Ser Lys Lys Phe
        130             135         140

Leu Pro Gly Met Ala Ile Gly Tyr Ser Ser Ser Lys Leu Thr Leu His
145             150         155             160

Val Gly Asp Gly Phe Glu Phe Met Lys Gln Asn Gln Asp Ala Phe Asp
            165         170             175

Val Ile Ile Thr Asp Ser Ser Asp Pro Met Gly Pro Ala Glu Ser Leu
            180         185             190

Phe Lys Glu Ser Tyr Tyr Gln Leu Met Lys Thr Ala Leu Lys Glu Asp
        195             200         205

Gly Val Leu Cys Cys Gln Gly Glu Cys Gln Trp Leu His Leu Asp Leu
        210             215         220

Ile Lys Glu Met Arg Gln Phe Cys Gln Ser Leu Phe Pro Val Val Ala
225             230         235             240

Tyr Ala Tyr Cys Thr Ile Pro Thr Tyr Pro Ser Gly Gln Ile Gly Phe
            245             250         255

Met Leu Cys Ser Lys Asn Pro Ser Thr Asn Phe Gln Glu Pro Val Gln
            260         265         270

Pro Leu Thr Gln Gln Gln Val Ala Gln Met Gln Leu Lys Tyr Tyr Asn
        275             280         285

Ser Asp Val His Arg Ala Ala Phe Val Leu Pro Glu Phe Ala Arg Lys
    290             295         300

Ala Leu Asn Asp Val Ser
305             310


<210> 1603
<211> 41
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
```

```
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>        .
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1603
Val Asn Val Ser Gly Phe Val Gln Gly Thr Cys Lys Gly Phe Gly Ser
 1               5                  10                  15

Met Val Arg Xaa Glu Arg Gln Glu Leu Glu Xaa Met Leu Leu Xaa Lys
            20                  25                  30

Ser Arg Asp Ile Asn Phe Gly Val Thr
            35                  40




<210> 1604
<211> 132
<212> PRT
<213> Homo sapiens

<400> 1604
Ser Ala Trp Arg Ser Pro Asn Thr Ala Val Gln Pro Ala Ala Cys Pro
 1               5                  10                  15

Lys Gln Cys Asn Pro Glu Thr Arg Pro Val Glu Lys Lys Ile Arg Ser
            20                  25                  30

Ala Leu Pro Thr Lys Thr Val Lys Pro Val Glu Asn Lys Asp Asp Asp
            35                  40                  45

Asp Ser Ile Ala Asp Phe Leu Asn Ser Asp Glu Glu Glu Asp Arg Val
    50                  55                  60

Ser Leu Gln Asn Leu Lys Asn Leu Gly Glu Ser Ala Thr Leu Arg Ser
65                  70                  75                  80

Leu Leu Leu Asn Pro His Leu Arg Gln Leu Met Val Asn Leu Asp Gln
                85                  90                  95

Gly Glu Asp Lys Ala Lys Leu Met Arg Ala Tyr Met Gln Glu Pro Leu
            100                 105                 110
```

```
Phe Val Glu Phe Ala Asp Cys Cys Leu Gly Ile Val Glu Pro Ser Gln
        115                 120                 125

Asn Glu Glu Ser
        130



<210> 1605
<211> 326
<212> PRT
<213> Homo sapiens


<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
<222> (182)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
<222> (226)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
<222> (285)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
<222> (287)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
```

<222> (290)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (298)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (306)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1605
Pro Arg Ile His Leu Glu Asn Val Ser Glu Asp Glu Ile Asn Arg Leu
 1   5   10   15

Leu Gly Met Val Val Asp Val Glu Asn Leu Phe Met Ser Xaa Xaa Lys
            20   25   30

Glu Glu Asp Thr Asp Thr Lys Gln Val Tyr Phe Tyr Leu Phe Lys Leu
            35   40   45

Leu Arg Lys Cys Ile Leu Gln Met Thr Arg Pro Val Val Glu Gly Ser
    50   55   60

Leu Gly Ser Pro Pro Phe Glu Lys Pro Asn Ile Glu Gln Gly Val Leu
    65   70   75   80

Asn Phe Val Gln Tyr Lys Phe Ser His Leu Ala Pro Arg Glu Arg Gln
                85   90   95

Thr Met Phe Glu Leu Ser Lys Met Phe Leu Leu Cys Leu Asn Tyr Trp
            100   105   110

Lys Leu Glu Xaa Pro Ala Gln Phe Arg Gln Arg Ser Gln Ala Glu Asp
        115   120   125

Val Ala Thr Tyr Lys Val Asn Tyr Thr Arg Trp Leu Cys Tyr Cys His
    130   135   140

Val Pro Gln Ser Cys Asp Ser Leu Pro Arg Tyr Glu Thr Thr His Val
145   150   155   160

Phe Gly Arg Ser Leu Leu Arg Ser Ile Phe Thr Val Thr Arg Arg Gln
                165   170   175

Leu Leu Glu Lys Phe Xaa Val Glu Lys Asp Lys Leu Val Pro Glu Lys
            180   185   190

Arg Thr Ser Ser Ser Leu Thr Ser Pro Ser Lys Ala Pro Ser Gly Leu

```
            195                    200                    205
Pro Gly Phe Gly Pro Lys Phe Thr Ser Ser Leu Leu Ser Pro Phe Phe
    210             215             220

Gln Xaa Gly Phe Leu Asp Trp Ser Leu Leu Ser Leu His Gly Pro Phe
225             230             235             240

Gly Ile Trp Ala Ser Thr Trp Gln Thr Cys Pro Trp Pro Arg Ser Asn
            245             250             255

Leu Leu Val Leu Val Trp Gly Trp Gln Ile Pro Val His Ala Gly Gly
            260             265             270

Gly Asp Leu Trp Gly Lys Leu Ser Asn Leu Gly Val Xaa Leu Xaa His
            275             280             285

Ala Xaa Leu Arg Gly Asp Thr Ala Gly Xaa Pro Gly Gln Leu Gln Ser
    290             295             300

Val Xaa Gly Leu Phe Pro Ala Pro Pro Ser Ser Ala Pro Ala Trp Val
305             310             315             320

Gly Ala Ala Thr Ala Pro
            325
```

```
<210> 1606
<211> 94
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1606
Phe Gly Thr Trp Lys Lys Lys Lys Thr Leu Arg Asp Ser Leu Cys
  1             5             10             15
```

```
Glu Glu Leu Leu Thr Glu Ser Leu Ser Thr Phe Leu Pro Pro Asp Xaa
            20              25              30

Glu Asp Xaa Gly Val Ser Val Ser Val Leu Ser Pro Leu Leu Phe Pro
        35              40              45

Asn Gln Gly Leu Cys His Tyr Cys Pro Ser Gln Leu Ser Met Gln Glu
        50              55              60

Asp Arg Val Ala Trp Xaa Ser Tyr Pro Cys Pro Ser Pro Lys Gly Ser
    65              70              75              80

Thr Arg Lys Leu Lys Arg Leu Lys Lys Lys Arg Val Cys Ser
                85              90
```

<210> 1607
<211> 246
<212> PRT
<213> Homo sapiens

<400> 1607

```
Ala Ala Ala Trp Cys Ala Arg Leu Ala Gly Asp Gly Ile Arg Arg Thr
 1           5              10              15

Trp Thr Pro Pro Glu Trp Lys Pro Lys Gln Glu Leu Leu Leu Leu Arg
            20              25              30

Gly Cys Arg Ser Arg Arg Glu Pro Pro Asp Arg Arg Gln Ser Glu Glu
        35              40              45

Gly Ala Thr Arg Leu Gly Lys Met Thr Gln Phe Leu Pro Pro Asn Leu
    50              55              60

Leu Ala Leu Phe Ala Pro Arg Asp Pro Ile Pro Tyr Leu Pro Pro Leu
    65              70              75              80

Glu Lys Leu Pro His Glu Lys His His Asn Gln Pro Tyr Cys Gly Ile
                85              90              95

Ala Pro Tyr Ile Arg Glu Phe Glu Asp Pro Arg Asp Ala Pro Pro Pro
            100             105             110

Thr Arg Ala Glu Thr Arg Glu Glu Arg Met Glu Arg Lys Arg Arg Glu
            115             120             125

Lys Ile Glu Arg Arg Gln Gln Glu Val Glu Thr Glu Leu Lys Met Trp
    130             135             140
```

```
Asp Pro His Asn Asp Pro Asn Ala Gln Gly Asp Ala Phe Lys Thr Leu
145             150             155             160

Phe Val Ala Arg Val Asn Tyr Asp Thr Thr Glu Ser Lys Leu Arg Arg
            165             170             175

Glu Phe Glu Val Tyr Gly Pro Ile Lys Arg Ile His Met Val Tyr Ser
            180             185             190

Lys Arg Ser Gly Lys Pro Arg Gly Tyr Ala Phe Ile Glu Tyr Glu His
        195             200             205

Glu Arg Asp Met His Ser Ala Tyr Lys His Ala Asp Gly Lys Lys Ile
    210             215             220

Asp Gly Arg Arg Val Leu Val Asp Val Glu Arg Gly Arg Thr Val Lys
225             230             235             240

Gly Trp Arg Pro Gly Gly
            245
```

```
<210> 1608
<211> 65
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (60)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1608
Gly Pro Ser Leu Ser Leu Met Phe Lys Gln Ser Leu Ser Met Lys Leu
1               5               10              15

Gly Gly Asp Arg Val Ser Cys Gln Phe Leu Thr Ala Thr Ser His Gln
            20              25              30

Trp Leu His Ser Val Ser Leu Thr Gln His Met Ala Gln Glu Cys Cys
        35              40              45

His Pro Ser Val Phe Tyr Ser Ser Asn Pro Arg Xaa Trp Xaa Leu Arg
    50              55              60
```

Asp
65

<210> 1609
<211> 213
<212> PRT
<213> Homo sapiens

<400> 1609
Glu Ser Gln Glu Asp Lys Glu Pro Lys Glu Glu Thr Pro Ala Gly Gly
 1   5   10   15

Arg Ala Ala Ala Ala Asp Pro Gly Trp Gly Ser Gln Pro Ala Gln Gln
             20   25   30

Arg Ala Ala Arg Lys Ala Ser Lys Glu Glu Gly Ala Arg Arg Gly Val
         35   40   45

Arg Gly Leu Gly Val Arg Pro Leu Arg Pro Leu Gly Asn Arg Glu Trp
     50   55   60

Thr Ala Glu Gln Thr Val Gly Leu Ser Gly Val Trp Gly Asn Thr Gly
65   70   75   80

Asn Ser Ser Gln Glu Gly Tyr Pro Pro Tyr Trp Leu Pro Pro Pro Ala
                 85   90   95

Ala Gln Leu Cys Pro Pro Glu Pro Ser Val Ser Leu Asn Pro Ser Leu
             100   105   110

Phe Phe Pro Thr Ser Thr Phe Trp Thr Phe Pro Leu Pro Phe Pro Val
         115   120   125

Phe Lys Ile Ser Val Thr Thr Pro Gly Thr Phe Ala Ala Asp Leu Gly
     130   135   140

Val Leu Phe Lys Arg Lys Ser Gly Gly Trp Glu Ser Leu Gly Glu Leu
145   150   155   160

Arg Leu Arg Val Glu Gly Val Cys Pro Ser Leu Gly Val Leu Val Pro
             165   170   175

Val Arg ly Val Tyr Gly Leu Phe Pro Ser Pro Ser Leu Ile Phe Phe
         180   185   190

Phe Phe Leu Lys Lys Ala Lys Met Arg Ile Asn Thr Ser Arg His Val
         195   200   205

Lys Lys Lys Lys Lys

210

<210> 1610
<211> 916
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (365)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (524)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (687)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (806)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1610
Arg Pro Thr Arg Pro Ala Gly Ser Thr Asp Cys His Gly Ala Ala Ala
 1   5   10   15

Gly Val Arg Ala Thr Leu Val Leu Glu Leu Leu Asp Thr Asp Gly Leu
            20   25   30

Val Val Cys Ala Arg Gly Leu Gly Ala Asp Arg Leu Leu Tyr His Phe
        35   40   45

Leu Gln Leu His Cys His Pro Ala Cys Leu Val Leu Val Leu Asn Thr
        50   55   60

Gln Pro Ala Glu Glu Glu Tyr Phe Ile Asn Gln Leu Lys Ile Glu Gly
65   70   75   80

Val Glu His Leu Pro Arg Arg Val Thr Asn Glu Ile Thr Ser Asn Ser
                85   90   95

Arg Tyr Glu Val Tyr Thr Gln Gly Gly Val Ile Phe Ala Thr Ser Arg
                100   105   110

Ile Leu Val Val Asp Phe Leu Thr Asp Arg Ile Pro Ser Asp Leu Ile
        115   120   125

Thr Gly Ile Leu Val Tyr Arg Ala His Arg Ile Ile Glu Ser Cys Gln
        130   135   140

Glu Ala Phe Ile Leu Arg Leu Phe Arg Gln Lys Asn Lys Arg Gly Phe
145   150   155   160

Ile Lys Ala Phe Thr Asp Asn Ala Val Ala Phe Asp Thr Gly Phe Cys
                165   170   175

His Val Glu Arg Val Met Arg Asn Leu Phe Val Arg Lys Leu Tyr Leu
                180   185   190

Trp Pro Arg Phe His Val Ala Val Asn Ser Phe Leu Glu Gln His Lys
        195   200   205

Pro Glu Val Val Glu Ile His Val Ser Met Thr Pro Thr Met Leu Ala
210   215   220

Ile Gln Thr Ala Ile Leu Asp Ile Leu Asn Ala Cys Leu Lys Glu Leu
225   230   235   240

Lys Cys His Asn Pro Ser Leu Glu Val Glu Asp Leu Ser Leu Glu Asn
                245   250   255

Ala Ile Gly Lys Pro Phe Asp Lys Thr Ile Arg His Tyr Leu Asp Pro
                260   265   270

Leu Trp His Gln Leu Gly Ala Lys Thr Lys Ser Leu Val Gln Asp Leu
        275   280   285

Lys Ile Leu Arg Thr Leu Leu Gln Tyr Leu Ser Gln Tyr Asp Cys Val
290   295   300

Thr Phe Leu Asn Leu Leu Glu Ser Leu Arg Ala Thr Glu Lys Ala Phe
305   310   315   320

Gly Gln Asn Ser Gly Trp Leu Phe Leu Asp Ser Ser Thr Ser Met Phe
                325   330   335

Ile Asn Ala Arg Ala Arg Val Tyr His Leu Pro Asp Ala Lys Met Ser
                340   345   350

Lys Lys Glu Lys Ile Ser Glu Lys Met Clu Ile Lys Xaa Gly Glu Glu
        355   360   365

Thr Lys Lys Glu Leu Val Leu Glu Ser Asn Pro Lys Trp Glu Ala Leu
        370   375   380

```
Thr Glu Val Leu Lys Glu Ile Glu Ala Glu Asn Lys Glu Ser Glu Ala
385             390             395             400

Leu Gly Gly Pro Gly Gln Val Leu Ile Cys Ala Ser Asp Asp Arg Thr
            405             410             415

Cys Ser Gln Leu Arg Asp Tyr Ile Thr Leu Gly Ala Glu Ala Phe Leu
            420             425             430

Leu Arg Leu Tyr Arg Lys Thr Phe Glu Lys Asp Ser Lys Ala Glu Glu
            435             440             445

Val Trp Met Lys Phe Arg Lys Glu Asp Ser Ser Lys Arg Ile Arg Lys
    450             455             460

Ser His Lys Arg Pro Lys Asp Pro Gln Asn Lys Glu Arg Ala Ser Thr
465             470             475             480

Lys Glu Arg Thr Leu Lys Lys Lys Lys Arg Lys Leu Thr Leu Thr Gln
            485             490             495

Met Val Gly Lys Pro Glu Glu Leu Glu Glu Glu Gly Asp Val Glu Glu
            500             505             510

Gly Tyr Arg Arg Glu Ile Ser Ser Ser Pro Glu Xaa Cys Pro Glu Glu
            515             520             525

Ile Lys His Glu Glu Phe Asp Val Asn Leu Ser Ser Asp Ala Ala Phe
    530             535             540

Gly Ile Leu Lys Glu Pro Leu Thr Ile Ile His Pro Leu Leu Gly Cys
545             550             555             560

Ser Asp Pro Tyr Ala Leu Thr Arg Val Leu His Glu Val Glu Pro Arg
            565             570             575

Tyr Val Val Leu Tyr Asp Ala Glu Leu Thr Phe Val Arg Gln Leu Glu
            580             585             590

Ile Tyr Arg Ala Ser Arg Pro Gly Lys Pro Leu Arg Val Tyr Phe Leu
            595             600             605

Ile Tyr Gly Gly Ser Thr Glu Glu Gln Arg Tyr Leu Thr Ala Leu Arg
    610             615             620

Lys Glu Lys Glu Ala Phe Glu Lys Leu Ile Arg Glu Lys Ala Ser Met
625             630             635             640

Val Val Pro Glu Glu Arg Glu Gly Arg Asp Glu Thr Asn Leu Asp Leu
            645             650             655
```

```
Val Arg Gly Thr Ala Ser Ala Asp Val Ser Thr Asp Thr Arg Lys Ala
            660             665             670

Gly Gly Gln Glu Gln Asn Gly Thr Gln Gln Ser Ile Val Val Xaa Met
        675             680             685

Arg Glu Phe Arg Ser Glu Leu Pro Ser Leu Ile His Arg Arg Asp Ile
    690             695             700

Asp Ile Glu Pro Val Thr Leu Glu Val Gly Asp Tyr Ile Leu Thr Pro
705             710             715             720

Glu Met Cys Val Glu Arg Lys Ser Ile Ser Asp Leu Ile Gly Ser Leu
            725             730             735

Asn Asn Gly Arg Leu Tyr Ser Gln Cys Ile Ser Met Ser Arg Tyr Tyr
            740             745             750

Lys Arg Pro Val Leu Leu Ile Glu Phe Asp Pro Ser Lys Pro Phe Ser
        755             760             765

Leu Thr Ser Arg Gly Ala Leu Phe Gln Glu Ile Ser Ser Asn Asp Ile
    770             775             780

Ser Ser Lys Leu Thr Leu Leu Thr Leu His Phe Pro Arg Leu Arg Ile
785             790             795             800

Leu Trp Cys Pro Ser Xaa His Ala Thr Ala Glu Leu Phe Glu Glu Leu
            805             810             815

Lys Gln Ser Lys Pro Gln Pro Asp Ala Ala Thr Ala Leu Ala Ile Thr
            820             825             830

Ala Asp Ser Glu Thr Leu Pro Glu Ser Glu Lys Tyr Asn Pro Gly Pro
            835             840             845

Gln Asp Phe Leu Leu Lys Met Pro Gly Val Asn Ala Lys Asn Cys Arg
    850             855             860

Ser Leu Met His His Val Lys Asn Ile Ala Glu Leu Ala Ala Leu Ser
865             870             875             880

Gln Asp Glu Leu Thr Ser Ile Leu Gly Asn Ala Ala Asn Ala Lys Gln
            885             890             895

Leu Tyr Asp Phe Ile His Thr Ser Phe Ala Glu Val Val Ser Lys Gly
            900             905             910

Lys Gly Lys Lys
        915
```

```
<210> 1611
<211> 197
<212> PRT
<213> Homo sapiens

<400> 1611
Gly Gly Gly Pro Ala Pro Gly Asp Ile Val Phe Cys Arg Asn Gln Pro
 1               5                  10                  15

Lys Asp Glu Asp Ala Asp Met Met Lys Tyr Ile Glu Thr Glu Leu Lys
            20                  25                  30

Lys Arg Lys Gly Ile Val Glu His Glu Glu Gln Lys Val Lys Pro Lys
            35                  40                  45

Asn Ala Glu Asp Cys Leu Tyr Glu Leu Pro Glu Asn Ile Arg Val Ser
        50                  55                  60

Ser Ala Lys Lys Thr Glu Glu Met Leu Ser Asn Gln Met Leu Ser Gly
65                  70                  75                  80

Ile Pro Glu Val Asp Leu Gly Ile Asp Ala Lys Ile Lys Asn Ile Ile
                85                  90                  95

Ser Thr Glu Asp Ala Lys Ala Arg Leu Leu Ala Glu Gln Gln Asn Lys
            100                 105                 110

Lys Lys Asp Ser Glu Thr Ser Phe Val Pro Thr Asn Met Ala Val Asn
        115                 120                 125

Tyr Val Gln His Asn Arg Phe Tyr His Glu Glu Leu Asn Ala Pro Ile
    130                 135                 140

Arg Arg Asn Lys Glu Glu Pro Lys Ala Arg Pro Leu Arg Val Gly Asp
145                 150                 155                 160

Thr Glu Lys Pro Glu Pro Glu Arg Ser Pro Pro Asn Arg Lys Arg Pro
                165                 170                 175

Ala Asn Glu Lys Ala Thr Asp Asp Tyr His Tyr Glu Lys Phe Lys Lys
                180                 185                 190

Met Asn Arg Arg Tyr
            195


<210> 1612
<211> 476
```

```
<212> PRT
<213> Homo sapiens

<400> 1612
Pro Arg Val Arg Gly Asp Val Gly Met Ala Gly Val Ala Ile Asp Thr
1               5                   10                  15

Val Glu Asp Thr Lys Ile Leu Phe Asp Gly Ile Pro Leu Glu Lys Met
                20                  25                  30

Ser Val Ser Met Thr Met Asn Gly Ala Val Ile Pro Val Leu Ala Asn
            35                  40                  45

Phe Ile Val Thr Gly Glu Glu Gln Gly Val Pro Lys Glu Lys Leu Thr
        50                  55                  60

Gly Thr Ile Gln Asn Asp Ile Leu Lys Glu Phe Met Val Arg Asn Thr
65                  70                  75                  80

Tyr Ile Phe Pro Pro Glu Pro Ser Met Lys Ile Ile Ala Asp Ile Phe
                85                  90                  95

Glu Tyr Thr Ala Lys His Met Pro Lys Phe Asn Ser Ile Ser Ile Ser
                100                 105                 110

Gly Tyr His Met Gln Glu Ala Gly Ala Asp Ala Ile Leu Glu Leu Ala
            115                 120                 125

Tyr Thr Leu Ala Asp Gly Leu Glu Tyr Ser Arg Thr Gly Leu Gln Ala
        130                 135                 140

Gly Leu Thr Ile Asp Glu Phe Ala Pro Arg Leu Ser Phe Phe Trp Gly
145                 150                 155                 160

Ile Gly Met Asn Phe Tyr Met Glu Ile Ala Lys Met Arg Ala Gly Arg
                165                 170                 175

Arg Leu Trp Ala His Leu Ile Glu Lys Met Phe Gln Pro Lys Asn Ser
                180                 185                 190

Lys Ser Leu Leu Leu Arg Ala His Cys Gln Thr Ser Gly Trp Ser Leu
            195                 200                 205

Thr Glu Gln Asp Pro Tyr Asn Asn Ile Val Arg Thr Ala Ile Glu Ala
        210                 215                 220

Met Ala Ala Val Phe Gly Gly Thr Gln Ser Leu His Thr Asn Ser Phe
225                 230                 235                 240

Asp Glu Ala Leu Gly Leu Pro Thr Val Lys Ser Ala Arg Ile Ala Arg
                245                 250                 255
```

```
Asn Thr Gln Ile Ile Ile Gln Glu Glu Ser Gly Ile Pro Lys Val Ala
            260             265             270

Asp Pro Trp Gly Gly Ser Tyr Met Met Glu Cys Leu Thr Asn Asp Val
            275             280             285

Tyr Asp Ala Ala Leu Lys Leu Ile Asn Glu Ile Glu Glu Met Gly Gly
    290             295             300

Met Ala Lys Ala Val Ala Glu Gly Ile Pro Lys Leu Arg Ile Glu Glu
305             310             315             320

Cys Ala Ala Arg Arg Gln Ala Arg Ile Asp Ser Gly Ser Glu Val Ile
            325             330             335

Val Gly Val Asn Lys Tyr Gln Leu Glu Lys Glu Asp Ala Val Glu Val
            340             345             350

Leu Ala Ile Asp Asn Thr Ser Val Arg Asn Arg Gln Ile Glu Lys Leu
            355             360             365

Lys Lys Ile Lys Ser Ser Arg Asp Gln Ala Leu Ala Glu Arg Cys Leu
    370             375             380

Ala Ala Leu Thr Glu Cys Ala Ala Ser Gly Asp Gly Asn Ile Leu Ala
385             390             395             400

Leu Ala Val Asp Ala Ser Arg Ala Arg Cys Thr Val Gly Glu Ile Thr
            405             410             415

Asp Ala Leu Lys Lys Val Phe Gly Glu His Lys Ala Asn Asp Arg Met
            420             425             430

Val Ser Gly Ala Tyr Arg Gln Glu Phe Gly Glu Ser Lys Glu Ile Thr
    435             440             445

Ser Ala Ile Lys Arg Val His Lys Phe Met Glu Arg Glu Gly Arg Ser
    450             455             460

Ser Ser Ser Cys Ser Lys Asn Gly Thr Arg Trp Pro
465             470             475


<210> 1613
<211> 319
<212> PRT
<213> Homo sapiens

<220>
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```
<221> SITE
<222> (84)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (289)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1613
Gln His His Arg Ala Ala His Leu Lys Trp Ile Phe Val Gly Gly Lys
 1               5                  10                  15

Gly Gly Val Gly Lys Thr Thr Cys Ser Cys Ser Leu Ala Val Gln Leu
                20              25              30

Ser Lys Gly Arg Glu Ser Val Leu Ile Ile Ser Thr Asp Pro Ala His
            35              40              45

Asn Ile Ser Asp Ala Phe Asp Gln Lys Phe Ser Lys Val Pro Thr Lys
        50              55              60

Val Lys Gly Tyr Asp Asn Leu Phe Ala Met Glu Ile Asp Pro Ser Leu
65              70              75              80

Gly Val Ala Xaa Xaa Pro Asp Glu Phe Phe Glu Glu Asp Asn Met Leu
                85              90                  95

Ser Met Gly Lys Lys Met Met Gln Glu Ala Met Ser Ala Phe Pro Gly
            100             105             110

Ile Asp Glu Ala Met Ser Tyr Ala Glu Val Met Arg Leu Val Lys Gly
        115             120             125

Met Asn Phe Ser Val Val Val Phe Asp Thr Ala Pro Thr Gly His Thr
    130             135             140

Leu Arg Leu Leu Asn Phe Pro Thr Ile Val Glu Arg Gly Leu Gly Arg
145             150             155             160

Leu Met Gln Ile Lys Asn Gln Ile Ser Pro Phe Ile Ser Gln Met Cys
                165             170             175

Asn Met Leu Gly Leu Gly Asp Met Asn Ala Asp Gln Leu Ala Ser Lys
            180             185             190
```

```
Leu Glu Glu Thr Leu Pro Val Ile Arg Ser Val Ser Glu Gln Phe Lys
        195             200             205

Asp Pro Glu Gln Thr Thr Phe Ile Cys Val Cys Ile Ala Glu Phe Leu
        210             215             220

Ser Leu Tyr Glu Thr Glu Arg Leu Ile Gln Glu Leu Ala Lys Cys Lys
225             230             235             240

Ile Asp Thr His Asn Ile Ile Val Asn Gln Leu Val Phe Pro Asp Pro
                245             250             255

Glu Lys Pro Cys Lys Met Cys Glu Ala Arg His Lys Ile Gln Ala Lys
        260             265             270

Tyr Leu Asp Gln Met Glu Asp Leu Tyr Glu Asp Phe His Ile Val Lys
        275             280             285

Xaa Pro Leu Leu Pro His Glu Val Arg Gly Ala Asp Lys Val Asn Thr
    290             295             300

Phe Ser Ala Leu Leu Leu Glu Pro Tyr Lys Pro Pro Ser Ala Gln
305             310             315
```

```
<210> 1614
<211> 207
<212> PRT
<213> Homo sapiens

<400> 1614
His Glu Glu Arg Gly Gln Gly Arg Phe Leu Lys Met Ala Ala Leu Lys
  1         5             10             15

Ala Leu Val Ser Gly Cys Gly Arg Leu Leu Arg Gly Leu Leu Ala Gly
        20             25             30

Pro Ala Ala Thr Ser Trp Ser Arg Leu Pro Ala Arg Gly Phe Arg Glu
        35             40             45

Val Val Glu Thr Gln Glu Gly Lys Thr Thr Ile Ile Glu Gly Arg Ile
    50             55             60

Thr Ala Thr Pro Lys Glu Ser Pro Asn Pro Asn Pro Ser Gly Gln
65             70             75             80

Cys Pro Ile Cys Arg Trp Asn Leu Lys His Lys Tyr Asn Tyr Asp Asp
                85             90             95

Val Leu Leu Leu Ser Gln Phe Ile Arg Pro His Gly Gly Met Leu Pro
```

```
                  100                    105                   110

 Arg Lys Ile Thr Gly Leu Cys Gln Glu Glu His Arg Lys Ile Glu Glu
         115                 120                 125

 Cys Val Lys Met Ala His Arg Ala Gly Leu Leu Pro Asn His Arg Pro
         130                 135                 140

 Arg Leu Pro Glu Gly Val Val Pro Lys Ser Lys Pro Gln Leu Asn Arg
 145                 150                 155                 160

 Tyr Leu Thr Arg Trp Ala Pro Gly Ser Val Lys Pro Ile Tyr Lys Lys
                 165                 170                 175

 Gly Pro Arg Trp Asn Arg Val Arg Met Pro Val Gly Ser Pro Leu Leu
                 180                 185                 190

 Arg Asp Asn Val Cys Tyr Ser Arg Thr Pro Trp Lys Leu Tyr His
          195                 200                 205
```

```
<210> 1615
<211> 304
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (174)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1615
 Pro Thr Arg Pro Arg Val His Leu Ala Thr Val Ser Ala Ser Ala Ala
  1           5                   10                  15

 Trp Asp Ala Leu Gly Leu Pro Val Arg Ser His Met Gln Gly Ser Thr
                 20                  25                  30

 Arg Arg Met Gly Val Met Thr Asp Val His Arg Arg Phe Leu Gln Leu
             35                  40                  45

 Leu Met Thr His Gly Val Leu Glu Glu Trp Asp Val Lys Arg Leu Gln
         50                  55                  60

 Thr His Cys Tyr Lys Val His Asp Arg Asn Ala Thr Val Asp Lys Leu
 65                  70                  75                  80

 Glu Asp Phe Ile Asn Asn Ile Asn Ser Val Leu Glu Ser Leu Tyr Ile
                 85                  90                  95
```

```
Glu Ile Lys Arg Gly Val Thr Glu Asp Asp Gly Arg Pro Ile Tyr Ala
            100                 105             110

Leu Val Asn Leu Ala Thr Thr Ser Ile Ser Lys Met Ala Thr Asp Phe
            115                 120             125

Ala Glu Asn Glu Leu Asp Leu Phe Arg Lys Ala Leu Glu Leu Ile Ile
    130                 135             140

Asp Ser Glu Thr Gly Phe Ala Ser Ser Thr Asn Ile Leu Asn Leu Val
145                 150             155                 160

Asp Gln Leu Lys Gly Lys Lys Met Arg Lys Lys Glu Ala Xaa Gln Val
            165                 170             175

Leu Gln Lys Phe Val Gln Asn Lys Trp Leu Ile Glu Lys Glu Gly Glu
            180                 185             190

Phe Thr Leu His Gly Arg Ala Ile Leu Glu Met Glu Gln Tyr Ile Arg
            195                 200             205

Glu Thr Tyr Pro Asp Ala Val Lys Ile Cys Asn Ile Cys His Ser Leu
    210                 215             220

Leu Ile Gln Gly Gln Ser Cys Glu Thr Cys Gly Ile Arg Met His Leu
225                 230             235                 240

Pro Cys Val Ala Lys Tyr Phe Gln Ser Asn Ala Glu Pro Arg Cys Pro
            245                 250             255

His Cys Asn Asp Tyr Trp Pro His Glu Ile Pro Lys Val Phe Asp Pro
            260                 265             270

Glu Lys Glu Arg Glu Ser Gly Val Leu Lys Ser Asn Lys Lys Ser Cys
    275                 280             285

Gly Pro Gly Ser Ile Ser His Arg Ala Leu Leu Arg Gly Trp Leu Pro
    290                 295             300
```

<210> 1616
<211> 223
<212> PRT
<213> Homo sapiens

<220>
<221> SITE

```
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (216)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1616
Ala Glu Xaa Leu Gly Gly Pro Gly Xaa Ala Ser Gly Gly Glu Thr Ser
 1               5                   10                  15

Val Glu Arg Arg Arg Thr Cys Ala Phe Asp Thr Leu Glu Ala Phe Leu
            20              25                  30

Ile Met Asp Gly Glu Asp Ile Pro Asp Phe Ser Ser Leu Lys Glu Glu
            35                  40                  45

Thr Ala Tyr Trp Lys Glu Leu Ser Leu Lys Tyr Lys Gln Arg Ala Thr
        50                  55                  60

Ile Val Ser Leu Glu Asp Phe Glu Gln Arg Leu Asn Gln Ala Ile Glu
 65                 70                  75                  80

Arg Asn Ala Phe Leu Glu Ser Glu Leu Asp Glu Lys Glu Ser Leu Leu
                85                  90                  95

Val Ser Val Gln Arg Leu Lys Asp Glu Ala Arg Asp Leu Arg Gln Glu
            100             105                 110

Leu Ala Val Arg Glu Arg Gln Gln Glu Val Thr Arg Lys Ser Ala Pro
        115                 120                 125

Ser Ser Pro Thr Leu Asp Cys Glu Lys Met Asp Ser Ala Val Gln Ala
        130             135                 140

Ser Leu Ser Leu Pro Ala Thr Pro Val Gly Lys Gly Thr Glu Asn Thr
145                 150                 155                 160

Phe Pro Ser Pro Lys Ala Ile Pro Asn Gly Phe Gly Thr Ser Pro Leu
                165             170                 175

Thr Pro Ser Ala Arg Ile Ser Ala Leu Asn Ile Val Gly Gly Ser Leu
            180             185                 190

Thr Glu Ser Arg Gly Phe Arg Ile Gln Ile Ser Ser Leu Gln Glu Phe
```

```
                  195                      200                      205

          Cys Lys Gly Pro Ser Ile Thr Xaa Ile Leu Tyr Phe Arg Glu Cys
                  210                      215                      220
```

```
<210> 1617
<211> 138
<212> PRT
<213> Homo sapiens

<400> 1617
Val Lys Gln Tyr Leu Arg Thr Gly Tyr Lys Gln Tyr Phe Leu Lys Leu
  1               5                   10                  15

Ser Pro Ile Phe Pro Pro Met Arg Pro Phe Gln Thr Gln Ile Ser His
                20                  25                  30

Asn Arg Ala Arg Thr Ile Ile Thr Ser Pro Asp Ser Glu Pro Glu Cys
            35                  40                  45

Phe Pro Gln Asp Cys Val Ala Pro Asn Ala Leu Arg Ser Ile Val Gly
        50                  55                  60

Glu Ser Cys His Trp Asp Ser Thr Ser Arg Pro Gly Asp Gln Ala Ser
 65                 70                  75                  80

Arg Ile Pro Leu Glu Thr Pro Pro Leu Phe His Tyr His Pro Ala Thr
                85                  90                  95

Ser Ser Ser Ala Met Pro Trp Phe Pro Leu Glu Ser Ser Gln Ser Gln
            100                 105                 110

Arg Arg Pro Pro Thr Thr Ser Lys Ala Ser Lys Val Leu Glu Ser Ala
            115                 120                 125

Pro Arg Leu Asn Arg Ala Ser Ile Ser Ser
        130                 135
```

```
<210> 1618
<211> 388
<212> PRT
<213> Homo sapiens

<400> 1618
Ala Glu Ser Thr Ala Arg Val Cys Cys Pro Ser Pro Arg Tyr Ala Gln
  1               5                   10                  15
```

```
Ser Arg Arg Ser Pro Ala Trp Gly Glu Gln Ser Asp His Arg Pro Gly
            20              25              30

Ala Ala Arg Arg Asp Ala Arg Cys Ala Leu Cys Pro Arg Ala Pro Thr
            35              40              45

Ala Pro Ala Ala Ala Ala Glu Ala Gln Arg Glu Asn Ala Pro Pro Arg
        50              55              60

Gly Pro Gly Ala Ala Ser Asp Pro Leu Ala Thr Cys Ala Gln Pro Glu
65              70              75              80

Val Ser Ser Glu Arg Arg Ala Gly Gly Gln Arg Gly Val Arg Gly Pro
                85              90              95

Pro Pro Ala Ala Arg Ala Arg Pro Leu Met Ala Ala Ile Arg Lys Lys
            100             105             110

Leu Val Val Val Gly Asp Gly Ala Cys Gly Lys Thr Cys Leu Leu Ile
        115             120             125

Val Phe Ser Lys Asp Glu Phe Pro Glu Val Tyr Val Pro Thr Val Phe
    130             135             140

Glu Asn Tyr Val Ala Asp Ile Glu Val Asp Gly Lys Gln Val Glu Leu
145             150             155             160

Ala Leu Trp Asp Thr Ala Gly Gln Glu Asp Tyr Asp Arg Leu Arg Pro
            165             170             175

Leu Ser Tyr Pro Asp Thr Asp Val Ile Leu Met Cys Phe Ser Val Asp
            180             185             190

Ser Pro Asp Ser Leu Glu Asn Ile Pro Glu Lys Trp Val Pro Glu Val
            195             200             205

Lys His Phe Cys Pro Asn Val Pro Ile Ile Leu Val Ala Asn Lys Lys
    210             215             220

Asp Leu Arg Ser Asp Glu His Val Arg Thr Glu Leu Ala Arg Met Lys
225             230             235             240

Gln Glu Pro Val Arg Thr Asp Asp Gly Arg Ala Met Ala Val Arg Ile
            245             250             255

Gln Ala Tyr Asp Tyr Leu Glu Cys Ser Ala Lys Thr Lys Glu Gly Val
            260             265             270

Arg Glu Val Phe Glu Thr Ala Thr Arg Ala Ala Ala Glu Ala Leu Arg
            275             280             285
```

```
Leu Pro Glu Arg Leu His Gln Leu Leu Gln Gly Ala Met Arg Ala Ala
    290             295             300

Pro Val Ala Pro Ala Pro Ala Gly Thr Ala Pro Pro Pro Gly Pro Val
305             310             315             320

Pro Arg Glu Pro Gly Glu Gly Glu Thr Arg Val Pro Gln Gly Pro His
            325             330             335

Arg Pro Ala Trp His Leu Ser Ala Asp Ala Ser Gly Leu Arg Gln Asp
            340             345             350

Leu Ala Trp Ala Pro Gly Ala Pro Ile Pro Val Ser Val Cys Val Gln
        355             360             365

Leu Cys Cys Thr Gly Leu Gly Ser Pro Leu Ser Ala Lys Gly Pro Leu
    370             375             380

Ser Met Leu Phe
385
```

```
<210> 1619
<211> 184
<212> PRT
<213> Homo sapiens

<400> 1619
Val Pro Val Arg Asn Ser Arg Val Asp Pro Arg Val Arg Gly Thr Arg
  1             5               10              15

Gly Arg Thr Arg Gly Arg Glu Gly Arg Ser Leu Trp Arg Lys Met Ala
            20              25              30

Ala Ala Trp Gly Ser Ser Leu Thr Ala Ala Thr Gln Arg Ala Val Thr
            35              40              45

Pro Trp Pro Arg Gly Arg Leu Leu Thr Ala Ser Leu Gly Pro Gln Ala
    50              55              60

Arg Arg Glu Ala Ser Ser Ser Ser Pro Glu Ala Gly Glu Gly Gln Ile
65              70              75              80

Arg Leu Thr Asp Ser Cys Val Gln Arg Leu Leu Glu Ile Thr Glu Gly
            85              90              95

Ser Glu Phe Leu Arg Leu Gln Val Glu Gly Gly Gly Cys Ser Gly Phe
            100             105             110

Gln Tyr Lys Phe Ser Leu Asp Thr Val Ile Asn Pro Asp Asp Arg Val
```

```
                 115                      120                      125

     Phe Glu Gln Gly Gly Ala Arg Val Val Val Asp Ser Asp Ser Leu Ala
         130                 135                 140

     Phe Val Lys Gly Ala Gln Val Asp Phe Ser Gln Glu Leu Ile Arg Ser
     145                 150                 155                 160

     Ser Phe Gln Val Leu Asn Asn Pro Gln Ala Gln Gln Gly Cys Ser Cys
                     165                 170                 175

     Gly Ser Ser Phe Ser Ile Lys Leu
                 180




     <210> 1620
     <211> 468
     <212> PRT
     <213> Homo sapiens

     <220>
     <221> SITE
     <222> (1)
     <223> Xaa equals any of the naturally occurring L-amino acids

     <220>
     <221> SITE
     <222> (4)
     <223> Xaa equals any of the naturally occurring L-amino acids

     <400> 1620
     Xaa Ala Pro Xaa Gly Pro Pro Ala Pro Pro Ala Leu Pro Pro Ala Ala
     1               5                   10                  15

     Ser Pro Gly Ala Pro Ala Arg Arg Pro Gly Gly Arg Ser Glu Glu Lys
                 20                  25                  30

     Ile Ser Asp Ser Glu Gly Phe Lys Ala Asn Leu Ser Leu Leu Arg Arg
                 35                  40                  45

     Pro Gly Glu Lys Thr Tyr Thr Gln Arg Cys Arg Leu Phe Val Gly Asn
         50                  55                  60

     Leu Pro Ala Asp Ile Thr Glu Asp Glu Phe Lys Arg Leu Phe Ala Lys
     65                  70                  75                  80

     Tyr Gly Glu Pro Gly Glu Val Phe Ile Asn Lys Gly Lys Gly Phe Gly
                     85                  90                  95

     Phe Ile Lys Leu Glu Ser Arg Ala Leu Ala Glu Ile Ala Lys Ala Glu
```

```
                    100                    105                    110

    Leu Asp Asp Thr Pro Met Arg Gly Arg Gln Leu Arg Val Arg Phe Ala
        115                  120                  125

    Thr His Ala Ala Ala Leu Ser Val Arg Asn Leu Ser Pro Tyr Val Ser
        130                  135                  140

    Asn Glu Leu Leu Glu Glu Ala Phe Ser Gln Phe Gly Pro Ile Glu Arg
    145                  150                  155                  160

    Ala Val Val Ile Val Asp Asp Arg Gly Arg Ser Thr Gly Lys Gly Ile
                     165                  170                  175

    Val Glu Phe Ala Ser Lys Pro Ala Ala Arg Lys Ala Phe Glu Arg Cys
                 180                  185                  190

    Ser Glu Gly Val Phe Leu Leu Thr Thr Thr Pro Arg Pro Val Ile Val
             195                  200                  205

    Glu Pro Leu Glu Gln Leu Asp Asp Glu Asp Gly Leu Pro Glu Lys Leu
        210                  215                  220

    Ala Gln Lys Asn Pro Met Tyr Gln Lys Glu Arg Glu Thr Pro Pro Arg
    225                  230                  235                  240

    Phe Ala Gln His Gly Thr Phe Glu Tyr Glu Tyr Ser Gln Arg Trp Lys
                 245                  250                  255

    Ser Leu Asp Glu Met Glu Lys Gln Gln Arg Glu Gln Val Glu Lys Asn
                 260                  265                  270

    Met Lys Asp Ala Lys Asp Lys Leu Glu Ser Glu Met Glu Asp Ala Tyr
        275                  280                  285

    His Glu His Gln Ala Asn Leu Leu Arg Gln Asp Leu Met Arg Arg Gln
        290                  295                  300

    Glu Glu Leu Arg Arg Met Glu Glu Leu His Asn Gln Glu Met Gln Lys
    305                  310                  315                  320

    Arg Lys Glu Met Gln Leu Arg Gln Glu Glu Glu Arg Arg Arg Arg Glu
                 325                  330                  335

    Glu Glu Met Met Ile Arg Gln Arg Glu Met Glu Glu Gln Met Arg Arg
                 340                  345                  350

    Gln Arg Glu Glu Ser Tyr Ser Arg Met Gly Tyr Met Asp Pro Arg Glu
        355                  360                  365

    Arg Asp Met Arg Met Gly Gly Gly Gly Ala Met Asn Met Gly Asp Pro
```

```
            370                     375                     380

Tyr Gly Ser Gly Gly Gln Lys Phe Pro Pro Leu Gly Gly Gly Gly Gly
385                 390             395                         400

Ile Gly Tyr Glu Ala Asn Pro Gly Val Pro Pro Ala Thr Met Ser Gly
                405             410             415

Ser Met Met Gly Ser Asp Met Arg Thr Glu Arg Phe Gly Gln Gly Gly
                420             425             430

Ala Gly Pro Val Gly Gly Gln Gly Pro Arg Gly Met Gly Pro Gly Thr
        435             440             445

Pro Ala Gly Tyr Gly Arg Gly Arg Glu Glu Tyr Glu Gly Pro Asn Lys
    450             455             460

Lys Pro Arg Phe
465
```

<210> 1621
<211> 114
<212> PRT
<213> Homo sapiens

<400> 1621

```
Ala Pro Ala Pro Thr Ser Cys Ser Leu Lys Pro Cys Ile Gly His Pro
 1               5               10                  15

Val Pro Ser Ser Gly Tyr Ser Cys His Val Gly Pro Thr Leu Ser Cys
                20              25                  30

Gly Thr Lys Arg Gly Thr Gln His Gly Asn Leu Thr Pro Glu Arg Ser
            35              40                  45

Asp Val Trp Phe Ala Leu Gln Leu Asn Arg Lys Leu Arg Leu Gly Val
        50              55                  60

Gly Asn Arg Ala Ile Arg Thr Glu Lys Ile Ile Cys Arg Asp Val Ala
65              70              75                      80

Arg Gly Tyr Glu Asn Val Pro Ile Pro Cys Val Lys Val Trp Met Gly
                85              90                  95

Ser Pro Ala Leu Arg Ile Thr Ser Thr Ser Gln Arg Thr Ala Arg Arg
            100             105                 110

Pro Pro
```

```
<210> 1622
<211> 399
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (397)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1622
Glu Val Cys His Gly Gly His Arg Gly Xaa Leu Gln Ser Trp Xaa Pro
 1               5                   10                  15


Pro Arg Glu Ala Glu Ser Leu Gln Pro Met Thr Val Val Gly Thr Asp
                20                  25                  30


Tyr Val Phe His Asn Asp Thr Lys Val Val Phe Leu Ser Pro Ala Val
                35                  40                  45


Pro Glu Glu Pro Glu Ala Tyr Asn Leu Thr Val Leu Ile Glu Met Asp
    50          .       55                  60


Gly His Arg Ala Leu Leu Arg Thr Glu Ala Gly Ala Phe Glu Tyr Val
 65                  70                  75                  80


Pro Asp Pro Thr Phe Glu Asn Phe Thr Gly Gly Val Lys Lys Gln Val
                85                  90                  95


Asn Lys Leu Ile His Ala Arg Gly Thr Asn Leu Asn Lys Ala Met Thr
                100                 105                 110


Leu Gln Glu Ala Glu Ala Phe Val Gly Ala Glu Arg Cys Thr Met Lys
                115                 120                 125


Thr Leu Thr Glu Thr Asp Leu Tyr Cys Glu Pro Pro Glu Val Gln Pro
    130                 135                 140
```

```
Pro Pro Lys Arg Arg Gln Lys Arg Asp Thr Thr His Asn Leu Pro Glu
145             150             155                 160

Phe Ile Val Lys Phe Gly Ser Arg Glu Trp Val Leu Gly Arg Val Glu
            165             170             175

Tyr Asp Thr Arg Val Ser Asp Val Pro Leu Ser Leu Ile Leu Pro Leu
            180             185             190

Val Ile Val Pro Met Val Val Val Ile Ala Val Ser Val Tyr Cys Tyr
        195             200             205

Trp Arg Lys Ser Gln Gln Ala Glu Arg Glu Tyr Glu Lys Ile Lys Ser
    210             215             220

Gln Leu Glu Gly Leu Glu Glu Ser Val Arg Asp Arg Cys Lys Lys Glu
225             230             235             240

Phe Thr Asp Leu Met Ile Glu Met Glu Asp Gln Thr Asn Asp Val His
            245             250             255

Glu Ala Gly Ile Pro Val Leu Asp Tyr Lys Thr Tyr Thr Asp Arg Val
        260             265             270

Phe Phe Leu Pro Ser Lys Asp Gly Asp Lys Asp Val Met Ile Thr Gly
        275             280             285

Lys Leu Asp Ile Pro Glu Pro Arg Arg Pro Val Val Glu Gln Ala Leu
    290             295             300

Tyr Gln Phe Ser Asn Leu Leu Asn Ser Lys Ser Phe Leu Ile Asn Phe
305             310             315             320

Ile His Thr Leu Glu Asn Gln Arg Glu Phe Ser Ala Arg Ala Lys Val
            325             330             335

Tyr Phe Ala Ser Leu Leu Thr Val Ala Leu His Gly Lys Leu Glu Tyr
            340             345             350

Tyr Thr Asp Ile Met His Thr Leu Phe Leu Glu Leu Leu Glu Gln Tyr
        355             360             365

Val Val Ala Lys Asn Pro Lys Leu Met Leu Arg Arg Ser Glu Thr Val
    370             375             380

Val Glu Arg Met Leu Ser Asn Trp Met Ser Ile Leu Xaa Pro Ile
385             390             395
```

<210> 1623

```
<211> 189
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (61)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (154)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1623
Ile Tyr Asp Phe Arg Thr Gly Met Arg Leu Lys Lys Glu Glu Lys Ser
 1               5                  10                  15


Arg Gln Glu Leu Glu Lys Leu Lys Arg Lys Leu Glu Gly Asp Ala Ser
                20                  25                  30


Asp Phe His Glu Gln Ile Ala Asp Leu Gln Ala Gln Ile Ala Glu Leu
            35                  40                  45


Lys Met Gln Leu Ala Lys Lys Glu Glu Glu Leu Gln Xaa Ala Leu Ala
        50                  55                  60


Arg Leu Asp Asp Glu Ile Leu Gln Lys Asn Asn Ala Leu Lys Lys Ile
65                  70                  75                  80


Arg Glu Leu Glu Gly His Ile Ser Asp Leu Gln Glu Asp Leu Asp Ser
                85                  90                  95


Glu Arg Ala Ala Arg Asn Lys Ala Glu Lys Gln Lys Arg Asp Leu Gly
            100                 105                 110


Glu Glu Leu Glu Ala Leu Lys Thr Glu Leu Glu Asp Thr Leu Asp Ser
            115                 120                 125


Thr Ala Thr Gln Gln Glu Leu Arg Ala Lys Arg Glu Gln Glu Val Thr
    130                 135                 140


Val Leu Lys Lys Ala Leu Asp Glu Glu Xaa Arg Ser His Glu Ala Gln
145                 150                 155                 160


Val Gln Glu Met Arg Gln Lys His Ala Gln Ala Val Glu Glu Leu Lys
                165                 170                 175


Gln Arg Ala Gly His Arg Ala His Thr Gly Pro Glu Glu
                180                     185
```

```
<210> 1624
<211> 276
<212> PRT
<213> Homo sapiens

<400> 1624
Leu Ile Ser Pro Val Trp Gly Asn Ile Gln Arg Ser Arg Ser Val Pro
 1               5                  10                  15

Leu Phe Pro Ser Gly Leu Val Leu Gly Gly Ile Trp Ala Arg Gly Pro
                20                  25                  30

Leu Leu Ala Leu Leu Ala Ser Phe Asn Ile Ile Ser Val Leu Asn Ala
            35                  40                  45

Glu Cys Tyr Leu Lys Gln Ile Leu His Pro Thr Ser His Phe Thr Val
        50                  55                  60

Ser Glu Thr Pro Pro Leu Ser Gly Asn Asp Thr Asp Ser Leu Ser Cys
 65                  70                  75                  80

Asp Ser Gly Ser Ser Ala Thr Ser Thr Pro Cys Val Ser Arg Leu Val
                85                  90                  95

Thr Gly His His Leu Trp Ala Ser Lys Asn Gly Arg His Val Leu Gly
               100                 105                 110

Leu Ile Glu Asp Tyr Glu Ala Leu Leu Lys Gln Ile Ser Gln Gly Gln
           115                 120                 125

Arg Leu Leu Ala Glu Met Asp Ile Gln Thr Gln Glu Ala Pro Ser Ser
       130                 135                 140

Thr Ser Gln Glu Leu Gly Thr Lys Gly Pro His Pro Ala Pro Leu Ser
145                 150                 155                 160

Lys Phe Val Ser Ser Val Ser Thr Ala Lys Leu Thr Leu Glu Glu Ala
                165                 170                 175

Tyr Arg Arg Leu Lys Leu Leu Trp Arg Val Ser Leu Pro Glu Asp Gly
               180                 185                 190

Gln Cys Pro Leu His Cys Glu Gln Ile Gly Glu Met Lys Ala Glu Val
           195                 200                 205

Thr Lys Leu His Lys Lys Leu Phe Glu Gln Glu Lys Lys Leu Gln Asn
       210                 215                 220

Thr Met Lys Leu Leu Gln Leu Ser Lys Arg Gln Glu Lys Val Ile Phe
```

```
225                     230                     235                     240
```

Asp Gln Leu Val Val Thr His Lys Ile Leu Arg Lys Ala Arg Gly Asn
                    245   250   255

Leu Glu Leu Arg Pro Gly Gly Ala His Pro Gly Thr Cys Ser Pro Ser
                260   265   270

Arg Pro Gly Ser
            275

<210> 1625
<211> 133
<212> PRT
<213> Homo sapiens

<400> 1625
Gln Ser Ala Val Gly Asn Thr Ala Thr Thr Leu Pro Trp Gln Gly Pro
  1   5   10   15

Glu Ser Ile Ser Gly Gly Ala Ala His Val Cys Met Cys Cys Val Ser
                20   25   30

Glu His Thr Arg Val His Thr His Thr His Val His Thr His Ala Leu
            35   40   45

Ser Pro Leu Arg Gly Leu Glu Val Trp Leu Ser Pro Trp Gly Lys Val
        50   55   60

Ser Ser Phe Ile Ser Leu Leu Gln Val Gly Val Pro Gly Val Arg Cys
    65   70   75   80

Arg Gly His Ile Ala Gly Cys Pro Leu Phe Val Ala Pro Ile Lys Gly
                85   90   95

Pro His Leu Val Asp Thr Trp Leu Ser Val Trp Ser Leu Pro Gln Pro
                100   105   110

Val Leu Val Thr Ile Thr Gly Leu Ala Phe Val Thr Met Met Thr Pro
                115   120   125

Ala Cys Leu Ile Phe
            130

<210> 1626
<211> 677
<212> PRT
```

<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (339)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (538)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (544)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1626
Ser Ser Gly Met Ala Leu Ala Val Ala Ala Xaa Ala Glu Ala Gln Ala
 1               5                  10                  15

Ala Arg Pro Gln Trp Arg Leu Glu Pro Glu Arg Arg Arg Arg Arg His
            20                  25                  30

Pro Gly Glu Phe Lys Met Ala Ala Gly Gly Thr Gly Gly Leu Arg Glu
        35                  40                  45

Glu Gln Arg Tyr Gly Leu Ser Cys Gly Arg Leu Gly Gln Asp Asn Ile
    50                  55                  60

Thr Val Leu His Val Lys Leu Thr Glu Thr Ala Ile Arg Ala Leu Glu
65                  70                  75                  80

Thr Tyr Gln Ser His Lys Asn Leu Ile Pro Phe Arg Pro Ser Ile Gln
                85                  90                  95

Phe Gln Gly Leu His Gly Leu Val Lys Ile Pro Lys Asn Asp Pro Leu
            100                 105                 110

Asn Glu Val His Asn Phe Asn Phe Tyr Leu Ser Asn Val Gly Lys Asp
            115                 120                 125

Asn Pro Gln Gly Ser Phe Asp Cys Ile Gln Gln Thr Phe Ser Ser Ser
    130                 135                 140

Gly Ala Ser Gln Leu Asn Cys Leu Gly Phe Ile Gln Asp Lys Ile Thr

```
145                   150                   155                   160
Val Cys Ala Thr Asn Asp Ser Tyr Gln Met Thr Arg Glu Arg Met Thr
                165                   170               175

Gln Ala Glu Glu Glu Ser Arg Asn Arg Ser Thr Lys Val Ile Lys Pro
            180               185               190

Gly Gly Pro Tyr Val Gly Lys Arg Val Gln Ile Arg Lys Ala Pro Gln
            195               200               205

Ala Val Ser Asp Thr Val Pro Glu Arg Lys Arg Ser Thr Pro Met Asn
    210               215               220

Pro Ala Asn Thr Ile Arg Lys Thr His Ser Ser Ser Thr Ile Ser Gln
225               230               235               240

Arg Pro Tyr Arg Asp Arg Val Ile His Leu Leu Ala Leu Lys Ala Tyr
            245               250               255

Lys Lys Pro Glu Leu Leu Ala Arg Leu Gln Lys Asp Gly Val Asn Gln
            260               265               270

Lys Asp Lys Asn Ser Leu Gly Ala Ile Leu Gln Gln Val Ala Asn Leu
            275               280               285

Asn Ser Lys Asp Leu Ser Tyr Thr Leu Lys Asp Tyr Val Phe Lys Glu
    290               295               300

Leu Gln Arg Asp Trp Pro Gly Tyr Ser Glu Ile Asp Arg Arg Ser Leu
305               310               315               320

Glu Ser Val Leu Ser Arg Lys Leu Asn Pro Ser Gln Asn Ala Thr Gly
            325               330               335

Thr Ser Xaa Ser Glu Ser Pro Val Cys Ser Ser Arg Asp Ala Val Ser
            340               345               350

Ser Pro Gln Lys Arg Leu Leu Asp Ser Glu Phe Ile Asp Pro Leu Met
            355               360               365

Asn Lys Lys Ala Arg Ile Ser His Leu Thr Asn Arg Val Pro Pro Thr
    370               375               380

Leu Asn Gly His Leu Asn Pro Thr Ser Glu Lys Ser Ala Ala Gly Leu
385               390               395               400

Pro Leu Pro Pro Ala Ala Ala Ala Ile Pro Thr Pro Pro Pro Leu Pro
            405               410               415

Ser Thr Tyr Leu Pro Ile Ser His Pro Pro Gln Ile Val Asn Ser Asn
```

```
                    420                   425                   430

        Ser Asn Ser Pro Ser Thr Pro Glu Gly Arg Gly Thr Gln Asp Leu Pro
                435                 440                 445

        Val Asp Ser Phe Ser Gln Asn Asp Ser Ile Tyr Glu Asp Gln Gln Asp
            450                 455                 460

        Lys Tyr Thr Ser Arg Thr Ser Leu Glu Thr Leu Pro Pro Gly Ser Val
        465                 470                 475                 480

        Leu Leu Lys Cys Pro Lys Pro Met Glu Glu Asn His Ser Met Ser His
                        485                 490                 495

        Lys Lys Ser Lys Lys Lys Ser Lys Lys His Lys Glu Lys Asp Gln Ile
                    500                 505                 510

        Lys Lys His Asp Ile Glu Thr Ile Glu Glu Lys Glu Glu Asp Leu Lys
                515                 520                 525

        Arg Glu Glu Glu Ile Ala Lys Leu Asn Xaa Ser Ser Pro Asn Ser Xaa
            530                 535                 540

        Gly Gly Val Lys Glu Asp Cys Thr Ala Ser Met Glu Pro Ser Ala Ile
        545                 550                 555                 560

        Glu Leu Pro Asp Tyr Leu Ile Lys Tyr Ile Ala Ile Val Ser Tyr Glu
                        565                 570                 575

        Gln Arg Gln Asn Tyr Lys Asp Asp Phe Asn Ala Glu Tyr Asp Glu Tyr
                    580                 585                 590

        Arg Ala Leu His Ala Arg Met Glu Thr Val Ala Arg Arg Phe Ile Lys
                595                 600                 605

        Leu Asp Ala Gln Arg Lys Arg Leu Ser Pro Gly Ser Lys Glu Tyr Gln
                610                 615                 620

        Asn Val His Glu Glu Val Leu Gln Glu Tyr Gln Lys Ile Lys Gln Ser
        625                 630                 635                 640

        Ser Pro Asn Tyr His Glu Glu Lys Tyr Arg Cys Glu Tyr Leu His Asn
                        645                 650                 655

        Lys Leu Ala His Ile Lys Arg Leu Ile Gly Glu Phe Asp Gln Gln Gln
                        660                 665                 670

        Ala Glu Ser Trp Ser
                675
```

```
<210> 1627
<211> 124
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (108)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (.123)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1627
Gly Pro Trp Gly Gly Phe Glu Leu Ser Arg Leu Cys Pro Tyr Arg Leu
  1               5                  10                  15

Pro Arg His Thr Arg Ser Val Phe Pro Leu Ser Pro Pro Ser Arg Ala
              20                  25                  30

Gly Pro Ser Gly Ile Glu Gly Ala Gly Ser Pro Arg Thr Arg Ala Gln
          35                  40                  45

Lys Ser Pro Thr Gly Ser Cys Ile Phe Xaa Arg Thr Ile Pro Gly Ala
      50                  55                  60

Leu Arg Gly Val Ser Gly Glu Thr Gly His Arg Gln Ser His Gly Pro
 65                  70                  75                  80

Pro Pro Lys Ala Gln Ala Pro Pro Ala Pro Pro His Pro Ser Ser Leu
              85                  90                  95

Thr His Ala Ala Ser Pro Pro Pro Cys Arg Cys Xaa Gly Gln Ser Pro
              100                 105                 110

Val Arg Pro Lys Thr Gly Leu Val Pro Gly Xaa Ala
          115                 120


<210> 1628
<211> 277
<212> PRT
```

<213> Homo sapiens

<220>
<221> SITE
<222> (176)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1628

```
Thr His Val Val Arg His Ala Tyr Arg Ser Tyr Phe Thr Phe Ile Gly
 1               5                  10                  15

Arg Val Ala Gly Leu Ala Val Phe His Gly Lys Leu Leu Asp Gly Phe
                 20                  25                  30

Phe Ile Arg Pro Phe Tyr Lys Met Met Leu Gly Lys Gln Ile Thr Leu
         35                  40                  45

Asn Asp Met Glu Ser Val Asp Ser Glu Tyr Tyr Asn Ser Leu Lys Trp
     50                  55                  60

Ile Leu Glu Asn Asp Pro Thr Glu Leu Asp Leu Met Phe Cys Ile Asp
 65                  70                  75                  80

Glu Glu Asn Phe Gly Gln Thr Tyr Gln Val Asp Leu Lys Pro Asn Gly
                 85                  90                  95

Ser Glu Ile Met Val Thr Asn Glu Asn Lys Arg Glu Tyr Ile Asp Leu
                100                 105                 110

Val Ile Gln Trp Arg Phe Val Asn Arg Val Gln Lys Gln Met Asn Ala
                115                 120                 125

Phe Leu Glu Gly Phe Thr Glu Leu Leu Pro Ile Asp Leu Ile Lys Ile
         130                 135                 140

Phe Asp Glu Asn Glu Leu Glu Leu Leu Met Cys Gly Leu Gly Asp Val
145                 150                 155                 160

Asp Val Asn Asp Trp Arg Gln His Ser Ile Tyr Lys Asn Gly Tyr Xaa
                165                 170                 175

Pro Asn His Pro Val Ile Gln Trp Phe Trp Lys Ala Val Leu Leu Met
                180                 185                 190

Asp Ala Glu Lys Arg Ile Arg Leu Leu Gln Phe Val Thr Gly Thr Ser
         195                 200                 205

Arg Val Pro Met Asn Gly Phe Ala Glu Leu Tyr Gly Ser Asn Gly Pro
         210                 215                 220

Gln Leu Phe Thr Ile Glu Gln Trp Gly Ser Pro Glu Lys Leu Pro Arg
```

```
        225                    230                    235                    240

Ala His Thr Cys Phe Asn Arg Leu Asp Leu Pro Pro Tyr Glu Thr Phe
                245                    250                    255

Glu Asp Leu Arg Glu Lys Leu Leu Met Ala Val Glu Asn Ala Gln Gly
                260                    265                    270

Phe Glu Gly Val Asp
                275
```

```
<210> 1629
<211> 135
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1629
Gly Ala Val Gly Gly Arg Xaa Gly Gly Arg Tyr Ala Gly Arg His Val
  1               5                    10                    15

Ser Arg Val Arg Ala Leu Tyr Lys Arg Val Leu Gln Leu His Arg Val
                20                    25                    30

Leu Pro Pro Asp Leu Lys Ser Leu Gly Asp Gln Tyr Val Lys Asp Glu
                35                    40                    45

Phe Arg Arg His Lys Thr Val Gly Ser Asp Glu Ala Gln Arg Phe Leu
        50                    55                    60

Gln Glu Trp Glu Val Tyr Ala Thr Ala Leu Leu Gln Gln Ala Asn Glu
  65                    70                    75                    80

Asn Arg Gln Asn Ser Thr Gly Lys Ala Cys Phe Gly Thr Phe Leu Pro
                85                    90                    95

Glu Glu Lys Leu Asn Asp Phe Arg Asp Glu Gln Ile Gly Gln Leu Gln
                100                   105                   110

Glu Leu Met Gln Glu Ala Thr Lys Pro Asn Arg Gln Phe Ser Ile Ser
                115                   120                   125

Glu Ser Met Lys Pro Lys Phe
                130                   135
```

```
<210> 1630
<211> 233
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (195)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (222)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (223)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (227)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (231)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1630
Met Cys Pro Ser Cys Ser Pro Cys Gly Met Asp Trp Val Val Glu Thr
 1               5                   10                  15

Met Pro Gln Gly Val Cys Gly Met Ser Pro Ser Val Trp Ser Val Xaa
                20                  25                  30

Xaa Glu Thr Val Arg Gly Leu Leu Leu His His Pro Thr Leu Pro Asn
            35                  40                  45
```

```
Pro Tyr Thr Met Ala Val Ala Ala Arg Val Thr Ala Ala Thr Thr Val
    50              55              60

Thr His Ile Thr Ala Phe Asp Pro Asp Ser Thr Gly Gln Gln Val Trp
    65              70              75              80

Gln Asp Leu Leu Gln Asp Gly Gln Leu Asp Ser Pro Thr Gly Gln Ser
                85              90              95

Thr Pro Thr Gln Lys Gly Val Gly Ile Ala Gly Ala Val Cys Val Ser
            100             105             110

Ser Lys Leu Arg Pro Arg Gly Gln Cys Arg Leu Glu Phe Ser Leu Ala
        115             120             125

Trp Asp Met Pro Arg Ile Met Phe Gly Ala Lys Gly Gln Val His Tyr
    130             135             140

Arg Arg Tyr Thr Arg Phe Phe Gly Gln Asp Gly Asp Ala Ala Pro Ala
145             150             155             160

Leu Ser His Tyr Ala Leu Cys Arg Tyr Ala Glu Trp Glu Glu Arg Ile
            165             170             175

Ser Ala Trp Gln Ser Pro Val Leu Asp Asp Arg Ser Leu Pro Ala Trp
            180             185             190

Tyr Lys Xaa Ala Leu Phe Asn Glu Leu Tyr Phe Leu Ala Asp Gly Gly
        195             200             205

Thr Val Trp Leu Glu Val Leu Glu Asp Ile Gln Asp Lys Xaa Xaa Phe
    210             215             220

Tyr Pro Xaa Arg Gly Gln Xaa Ala Tyr
225             230
```

<210> 1631
<211> 153
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE

```
<222> (118)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1631
Trp Gly Pro Arg Leu Pro Pro Pro Xaa Lys Lys Ala Leu Leu Ala Leu
1               5               10              15

Lys Lys Gln Ser Ser Ser Ser Thr Thr Ser Gln Gly Gly Val Lys Arg
            20              25              30

Ser Leu Ser Glu Gln Pro Val Met Asp Thr Ala Thr Ala Thr Glu Gln
            35              40              45

Ala Lys Gln Leu Val Lys Ser Gly Ala Ile Ser Ala Ile Lys Ala Glu
        50              55              60

Thr Lys Asn Ser Gly Phe Lys Arg Ser Arg Thr Leu Glu Gly Lys Leu
65              70              75              80

Lys Asp Pro Glu Lys Gly Pro Val Pro Thr Phe Gln Pro Phe Gln Arg
                85              90              95

Ser Ile Ser Ala Asp Asp Asp Leu Gln Glu Ser Ser Arg Arg Pro Gln
            100             105             110

Arg Lys Ser Leu Tyr Xaa Ser Ser Leu Ala Val Gln Asn Ser Pro Lys
            115             120             125

Gly Cys His Arg Asp Lys Arg Thr Gln Ile Val Tyr Ser Asp Asp Val
    130             135             140

Tyr Lys Glu Asn Leu Val Asp Gly Phe
145             150


<210> 1632
<211> 224
<212> PRT
<213> Homo sapiens

<400> 1632
Pro Thr Arg Cys Gly Ala Ser Gly Ser Arg Pro Pro Ser Gly Ser Asp
1               5               10              15

Pro Ala Asn Gly Phe Gly Tyr Ile Phe Met Leu Gly Phe Ile Thr Arg
            20              25              30

Pro Pro His Arg Phe Leu Ser Leu Leu Cys Pro Gly Leu Arg Ile Pro
            35              40              45
```

Gln Leu Ser Val Leu Cys Ala Gln Pro Arg Pro Arg Ala Met Ala Ile
    50   55   60

Ser Ser Ser Ser Cys Glu Leu Pro Leu Val Ala Val Cys Gln Val Thr
65   70   75   80

Ser Thr Pro Asp Lys Gln Gln Asn Phe Lys Thr Cys Ala Glu Leu Val
            85   90   95

Arg Glu Ala Ala Arg Leu Gly Ala Cys Leu Ala Phe Leu Pro Glu Ala
            100   105   110

Phe Asp Phe Ile Ala Arg Asp Pro Ala Glu Thr Leu His Leu Ser Glu
        115   120   125

Pro Leu Gly Gly Lys Leu Leu Glu Glu Tyr Thr Gln Leu Ala Arg Glu
    130   135   140

Cys Gly Leu Trp Leu Ser Leu Gly Gly Phe His Glu Arg Gly Gln Asp
145   150   155   160

Trp Glu Gln Thr Gln Lys Ile Tyr Asn Cys His Val Leu Leu Asn Ser
            165   170   175

Lys Gly Ala Val Val Ala Thr Tyr Arg Lys Thr His Leu Cys Asp Val
            180   185   190

Glu Ile Pro Gly Gln Gly Leu Cys Val Lys Ala Thr Leu Pro Cys Leu
        195   200   205

Gly Pro Val Leu Ser His Leu Ser Ala His Gln Gln Ala Arg Leu Val
    210   215   220

<210> 1633
<211> 668
<212> PRT
<213> Homo sapiens

<400> 1633
Thr Ile Asn Gly Val Ile Leu Ile Ser Val Phe Phe Ser Phe Phe Phe
    1   5   10   15

Leu His Pro Met Leu Ser Val Val Val Cys Val Val Gly Leu Ser Pro
            20   25   30

Gly Gln Tyr Phe Tyr Phe Gln Glu Val Phe Pro Val Leu Ala Ala Lys

```
            35                    40                    45

His Cys Ile Met Gln Ala Asn Ala Glu Tyr His Gln Ser Ile Leu Ala
    50                  55                  60

Lys Gln Gln Lys Lys Phe Gly Glu Glu Ile Ala Arg Leu Gln His Ala
65                  70                  75                  80

Ala Glu Leu Ile Lys Thr Val Ala Ser Arg Tyr Asp Glu Tyr Val Asn
                85                  90                  95

Val Lys Asp Phe Ser Asp Lys Ile Asn Arg Ala Leu Ala Ala Ala Lys
            100                 105                 110

Lys Asp Asn Asp Phe Ile Tyr His Asp Arg Val Pro Asp Leu Lys Asp
        115                 120                 125

Leu Asp Pro Ile Gly Lys Ala Thr Leu Val Lys Ser Thr Pro Val Asn
    130                 135                 140

Val Pro Ile Ser Gln Lys Phe Thr Asp Leu Phe Glu Lys Met Val Pro
145                 150                 155                 160

Val Ser Val Gln Gln Ser Leu Ala Ala Tyr Asn Gln Arg Lys Ala Asp
            165                 170                 175

Leu Val Asn Arg Ser Ile Ala Gln Met Arg Glu Ala Thr Thr Leu Ala
        180                 185                 190

Asn Gly Val Leu Ala Ser Leu Asn Leu Pro Ala Ala Ile Glu Asp Val
        195                 200                 205

Ser Gly Asp Thr Val Pro Gln Ser Ile Leu Thr Lys Ser Arg Ser Val
    210                 215                 220

Ile Glu Gln Gly Gly Ile Gln Thr Val Asp Gln Leu Ile Lys Glu Leu
225                 230                 235                 240

Pro Glu Leu Leu Gln Arg Asn Arg Glu Ile Leu Asp Glu Ser Leu Arg
            245                 250                 255

Leu Leu Asp Glu Glu Glu Ala Thr Asp Asn Asp Leu Arg Ala Lys Phe
            260                 265                 270

Lys Glu Arg Trp Gln Arg Thr Pro Ser Asn Glu Leu Tyr Lys Pro Leu
        275                 280                 285

Arg Ala Glu Gly Thr Asn Phe Arg Thr Val Leu Asp Lys Ala Val Gln
    290                 295                 300

Ala Asp Gly Gln Val Lys Glu Cys Tyr Gln Ser His Arg Asp Thr Ile
```

```
305                        310                    315                       320
Val Leu Leu Cys Lys Pro Glu Pro Glu Leu Asn Ala Ala Ile Pro Ser
                325                    330                    335

Ala Asn Pro Ala Lys Thr Met Gln Gly Ser Glu Val Val Asn Val Leu
                340                    345                    350

Lys Ser Leu Leu Ser Asn Leu Asp Glu Val Lys Lys Glu Arg Glu Gly
                355                    360                    365

Leu Glu Asn Asp Leu Lys Ser Val Asn Phe Asp Met Thr Ser Lys Phe
    370                    375                    380

Leu Thr Ala Leu Ala Gln Asp Gly Val Ile Asn Glu Glu Ala Leu Ser
385                    390                    395                    400

Val Thr Glu Leu Asp Arg Val Tyr Gly Gly Leu Thr Thr Lys Val Gln
                405                    410                    415

Glu Ser Leu Lys Lys Gln Glu Gly Leu Leu Lys Asn Ile Gln Val Ser
                420                    425                    430

His Gln Glu Phe Ser Lys Met Lys Gln Ser Asn Asn Glu Ala Asn Leu
                435                    440                    445

Arg Glu Glu Val Leu Lys Asn Leu Ala Thr Ala Tyr Asp Asn Phe Val
    450                    455                    460

Glu Leu Val Ala Asn Leu Lys Glu Gly Thr Lys Phe Tyr Asn Glu Leu
465                    470                    475                    480

Thr Glu Ile Leu Val Arg Phe Gln Asn Lys Cys Ser Asp Ile Val Phe
                485                    490                    495

Ala Arg Lys Thr Glu Arg Asp Glu Leu Leu Lys Asp Leu Gln Gln Ser
                500                    505                    510

Ile Ala Arg Glu Pro Ser Ala Pro Ser Ile Pro Thr Pro Ala Tyr Gln
                515                    520                    525

Ser Ser Pro Ala Gly Gly His Ala Pro Thr Pro Pro Thr Pro Ala Pro
    530                    535                    540

Arg Thr Met Pro Pro Thr Lys Pro Gln Pro Pro Ala Arg Pro Pro Pro
545                    550                    555                    560

Pro Val Leu Pro Ala Asn Arg Ala Pro Ser Ala Thr Ala Pro Ser Pro
                565                    570                    575

Val Gly Ala Gly Thr Ala Ala Pro Ala Pro Ser Gln Thr Pro Gly Ser
```

```
          580                     585                     590

Ala Pro Pro Pro Gln Ala Gln Gly Pro Pro Tyr Pro Thr Tyr Pro Gly
        595                     600                 605

Tyr Pro Gly Tyr Cys Gln Met Pro Met Pro Met Gly Tyr Asn Pro Tyr
    610                     615                 620

Ala Tyr Gly Gln Tyr Asn Met Pro Tyr Pro Pro Val Tyr His Gln Ser
625                     630                 635                 640

Pro Gly Gln Ala Pro Tyr Pro Gly Pro Gln Gln Pro Ser Tyr Pro Phe
                645                     650                 655

Pro Gln Pro Pro Gln Gln Ser Tyr Tyr Pro Gln Gln
            660                     665
```

<210> 1634
<211> 99
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (75)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (78)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (81)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1634

```
Gly Glu Ala Ala Lys Met Ser Ser Glu Pro Pro Pro Tyr Pro Gly
 1               5                   10                  15

Gly Pro Thr Ala Pro Leu Leu Glu Glu Lys Ser Gly Ala Pro Pro Thr
            20                  25                  30
```

```
Pro Gly Arg Ser Ser Pro Ala Val Met Gln Pro Pro Pro Gly Met Pro
        35              40              45

Leu Pro Pro Ala Asp Ile Gly Pro Pro Pro Tyr Glu Pro Pro Gly Xaa
        50              55              60

Pro Met Pro Gln Pro Gly Phe Ile Pro Pro Xaa Met Ser Xaa Asp Gly
 65              70              75              80

Xaa Tyr Met Pro Pro Gly Phe Leu Pro Phe Phe Arg Gly Pro His Pro
                85              90              95

Pro Leu Gly
```

```
<210> 1635
<211> 74
<212> PRT
<213> Homo sapiens

<400> 1635
Gly Glu Ala Ala Phe Cys Pro Ser Pro His Ser His Leu Ile Tyr Leu
 1              5               10              15

Ile Gln Ser Gln Leu Leu Lys Phe Gly Lys Asp Gln Ile Ala Leu Gln
        20              25              30

Phe Phe Ser Leu Cys Ser Ile Leu Lys Ser Trp Lys Ile Leu Trp Asn
        35              40              45

Ser Ser Val Tyr Arg Ala Gln Val Lys Ala Leu Ser Lys Val Tyr Leu
        50              55              60

Phe Ile Tyr Tyr Pro Lys Asn Ala Leu Pro
 65              70
```

```
<210> 1636
<211> 67
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1636
```

```
Arg His Arg Ser Val Ser Thr Pro Arg Ala Gly Gly Ile Val Trp Phe
1               5               10                  15

His Glu Gly Leu Lys Ser Val Ile Pro Lys Val Gly Leu Gln Ala Ala
            20              25              30

Ala Pro Ser Ile Cys Val Phe Leu Ser Gly Thr Val Gly Leu Tyr Xaa
        35              40              45

Arg Leu Thr Cys Phe Gly Ser Arg Gly Ile Ile Leu Gly Phe Gly Lys
    50              55              60

Thr His Phe
65
```

<210> 1637
<211> 64
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1637
```
Thr Phe Ile Tyr Val Gly Leu Tyr Leu Thr Ile Cys Asn Phe Lys Val
1               5               10                  15

Met Leu Gly Gln Xaa Asn Val Ser Ala Ser Arg Ile Ala Ile Lys Tyr
            20              25              30

His Thr Lys Phe Gly Gly Arg Thr Asp Leu Cys Tyr Lys Glu Met Glu
        35              40              45

Lys Ser Ser Leu Cys His Gly Asp Glu Lys Pro Ala Ser His Ser Asn
    50              55              60
```

<210> 1638
<211> 93
<212> PRT
<213> Homo sapiens

<220>

<221> SITE
<222> (90)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1638
Gln Arg Gly Asp Ser Ala Asp Thr Ala Ser Leu Arg Phe Asn Thr Pro
1   5   10   15

Ser Phe Asp Leu Ser Cys Pro His Tyr Pro Arg Lys Ile Gln Ser Ser
            20   25   30

Phe Gln Ser Ile Leu Ile Asn Pro Leu Asp Pro Lys Phe Arg Glu Val
        35   40   45

Pro Leu Pro Ser Ser Leu Leu Pro Gly Pro Thr Glu Glu His Pro Thr
    50   55   60

Thr Leu His Gln Leu Leu Lys Thr His Lys Gly Lys Ile Pro Thr Gly
65   70   75   80

Pro Cys Gln Glu Val Val Glu Leu Pro Xaa Arg Phe His
                85   90

<210> 1639
<211> 222
<212> PRT
<213> Homo sapiens

<400> 1639
His Glu Leu Asn Cys Lys Asp Ala Val Ser Arg Lys Arg Ser His Ser
1   5   10   15

Ala Ser Glu Lys Ser Gly Thr Gly Thr Ser Ile Ser Lys Arg Leu Asn
            20   25   30

Met Asn Pro Gln Ile Arg Asn Pro Met Lys Ala Met Tyr Pro Gly Thr
        35   40   45

Phe Tyr Phe Gln Phe Lys Asn Leu Trp Glu Ala Asn Asp Arg Asn Glu
    50   55   60

Thr Trp Leu Cys Phe Thr Val Glu Gly Ile Lys Arg Arg Ser Val Val
65   70   75   80

Ser Trp Lys Thr Gly Val Phe Arg Asn Gln Val Asp Ser Glu Thr His
                85   90   95

Cys His Ala Glu Arg Cys Phe Leu Ser Trp Phe Cys Asp Asp Ile Leu
                100   105   110

```
Ser Pro Asn Thr Lys Tyr Gln Val Thr Trp Tyr Thr Ser Trp Ser Pro
        115             120             125

Cys Pro Asp Cys Ala Gly Glu Val Ala Glu Phe Leu Ala Arg His Ser
        130             135             140

Asn Val Asn Leu Thr Ile Phe Thr Ala Arg Leu Tyr Tyr Phe Gln Tyr
145             150             155             160

Pro Cys Tyr Gln Glu Gly Leu Arg Ser Leu Ser Gln Glu Gly Val Ala
                165             170             175

Val Glu Ile Met Asp Tyr Glu Asp Phe Lys Tyr Cys Trp Glu Asn Phe
                180             185             190

Val Tyr Asn Asp Asn Glu Pro Phe Lys Pro Trp Lys Gly Leu Lys Thr
        195             200             205

Asn Phe Arg Leu Leu Lys Arg Arg Leu Arg Glu Ser Leu Gln
        210             215             220
```

<210> 1640
<211> 436
<212> PRT
<213> Homo sapiens

<400> 1640

```
Gly Leu Lys Arg Val Ser Ala Thr Ala Ala His Arg Asn Ala Leu Gln
  1             5               10              15

Asn Pro Lys Gln Gly Gly Thr Gln Leu Lys Thr Glu Lys Ile His Met
            20              25              30

Phe Leu Leu Ala Pro Val Ala Thr Gly Ile Asn Ser His Asn Asp Arg
        35              40              45

Gly Arg Gly Ile Gln Gly Thr Ile Asn Glu Gln Cys Ala Ser Ser Leu
    50              55              60

Lys Ile Arg Ala Ser His Gly Thr Lys Met Met Thr Pro Glu Val Leu
65              70              75              80

Ala Glu Ala Tyr Gly Lys Lys Glu Trp Lys His Phe Leu Ser Asp Thr
                85              90              95

Gly Met Ala Cys Arg Ser Gly Lys Tyr Tyr Phe Tyr Asp Asn Tyr Phe
            100             105             110
```

```
Asp Leu Pro Gly Ala Leu Leu Cys Ala Arg Val Val Asp Tyr Leu Thr
        115             120             125

Lys Leu Asn Asn Gly Gln Lys Thr Phe Asp Phe Trp Lys Asp Ile Val
        130             135             140

Ala Ala Ile Gln His Asn Tyr Lys Met Ser Ala Phe Lys Glu Asn Cys
145             150             155             160

Gly Ile Tyr Phe Pro Glu Ile Lys Arg Asp Pro Gly Arg Tyr Leu His
            165             170             175

Ser Cys Pro Glu Ser Val Lys Lys Trp Leu Arg Gln Leu Lys Asn Ala
            180             185             190

Gly Lys Ile Leu Leu Leu Ile Thr Ser Ser His Ser Asp Tyr Cys Arg
        195             200             205

Leu Leu Cys Glu Tyr Ile Leu Gly Asn Asp Phe Thr Asp Leu Phe Asp
    210             215             220

Ile Val Ile Thr Asn Ala Leu Lys Pro Gly Phe Phe Ser His Leu Pro
225             230             235             240

Ser Gln Arg Pro Phe Arg Thr Leu Glu Asn Asp Glu Glu Gln Glu Ala
            245             250             255

Leu Pro Ser Leu Asp Lys Pro Gly Trp Tyr Ser Gln Gly Asn Ala Val
            260             265             270

His Leu Tyr Glu Leu Leu Lys Lys Met Thr Gly Lys Pro Glu Pro Lys
        275             280             285

Val Val Tyr Phe Gly Asp Ser Met His Ser Asp Ile Phe Pro Ala Arg
    290             295             300

His Tyr Ser Asn Trp Glu Thr Val Leu Ile Leu Glu Glu Leu Arg Gly
305             310             315             320

Asp Glu Gly Thr Arg Ser Gln Arg Pro Glu Glu Ser Glu Pro Leu Glu
            325             330             335

Lys Lys Gly Lys Tyr Glu Gly Pro Lys Ala Lys Pro Leu Asn Thr Ser
            340             345             350

Ser Lys Lys Trp Gly Ser Phe Phe Ile Asp Ser Val Leu Gly Leu Glu
        355             360             365

Asn Thr Glu Asp Ser Leu Val Tyr Thr Trp Ser Cys Lys Arg Ile Ser
    370             375             380
```

```
Thr Tyr Ser Thr Ile Ala Ile Pro Ser Ile Glu Ala Ile Ala Glu Leu
385               390          395                400

Pro Leu Asp Tyr Lys Phe Thr Arg Phe Ser Ser Ser Asn Ser Lys Thr
            405              410              415

Ala Gly Tyr Tyr Pro Asn Pro Pro Leu Val Leu Ser Ser Asp Glu Thr
            420              425              430

Leu Ile Ser Lys
        435
```

```
<210> 1641
<211> 81
<212> PRT
<213> Homo sapiens

<400> 1641
Pro His Ser Leu Leu Phe Phe Leu Leu Gln Thr Leu Arg Gln Cys Ser
  1           5              10              15

Asn Thr Ser Phe Thr His Pro Pro Asn Asn Ser Val His Ser Val Phe
            20              25              30

Phe Pro Leu Ser Gly Val Ser Ser Met Leu Val Arg Leu Gly Glu His
        35              40              45

Leu Asp Leu Phe His Arg Lys Gly Cys Phe Gln Pro Val Ser Val Met
    50              55              60

Leu Val Leu Leu Gln Gln Ser Lys Ser Lys Gly Phe Arg Ser Leu Phe
 65              70              75              80

Asp
```

```
<210> 1642
<211> 86
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (66)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
```

<221> SITE
<222> (73)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1642
Thr Glu Lys Lys Lys Lys Lys Gly Gly Arg Ser Arg Gly Ser Lys Leu
1   5   10   15

Thr Tyr Ala Cys Met Arg Arg His Ser Ser Ser Ile Val Ser Pro Lys
                20   25   30

Phe Asn Ser Leu Ala Val Val Leu Gln Arg Arg Asp Trp Glu Asn Pro
            35   40   45

Gly Val Thr Gln Leu Asn Arg Leu Ala Ala His Pro Pro Phe Ala Ser
        50   55   60

Trp Xaa Asn Ser Glu Glu Ala Arg Xaa Gly Ser Pro Phe Pro His Asn
65   70   75   80

Cys Ala Leu Glu Trp Ala
                85

<210> 1643
<211> 118
<212> PRT
<213> Homo sapiens

<400> 1643
His Cys Val Glu Gly Thr Ser Leu Ser Leu Pro Cys Leu Thr Val Ser
1   5   10   15

Gly Ser Phe Ser Pro Cys Val Ser Trp Cys Ser Gln Pro His Gln Ser
                20   25   30

Pro Cys Arg Glu Leu Thr Ala Phe Thr Leu Lys Ala Arg Val Thr Trp
            35   40   45

Val Val Arg His His Leu Ser Pro Cys Pro His Leu Leu Val Trp Gly
        50   55   60

Phe Ser Gly Glu Leu Thr Ala Val Ser Thr Pro Leu Ser Pro His Pro
65   70   75   80

Pro Arg Pro Ala Trp Gly Thr His Phe Leu Leu Gly Gly Ala Ser Met
                85   90   95

Val Arg Gly Pro Ala Ser Leu His Thr Ala Arg Thr Ala Leu His Arg
                100   105   110

```
Pro Thr Pro Tyr Asp Thr
        115
```

```
<210> 1644
<211> 52
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1644
Arg Leu Ser Glu Ser Leu Ser Val Ser Ser Leu Gln Xaa Arg Ser Xaa
 1               5                   10                  15

Xaa Val Lys Pro Leu Thr Ala Val Met Ser Glu Val Ile Pro Arg Thr
                20                  25                  30

Trp Glu Thr Ala Val His Gly Trp Ile Leu Leu Thr Ser Ala Glu Phe
            35                  40                  45

Cys Gln Val Thr
        50
```

```
<210> 1645
<211> 346
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<220>
<221> SITE
<222> (83)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1645
Pro Pro Ala Ser Thr Leu Pro Trp Asp Leu Met Lys Ser Arg Lys Asn
 1   5   10   15

Phe Lys Lys Trp Pro Leu Thr Leu Leu Pro Glu Arg Trp Leu Gln Ile
                20   25   30

Trp Gln Xaa Gly Thr Arg Ser Met Cys Ala Trp Met Ile Asp Ser Phe
            35   40   45

Gly Asn Glu Glu Gln Arg His Lys Phe Cys Pro Pro Leu Cys Thr Met
        50   55   60

Glu Lys Phe Ala Ser Tyr Cys Leu Thr Glu Pro Gly Ser Gly Ser Asp
65   70   75   80

Ala Ala Xaa Leu Leu Thr Ser Ala Lys Lys Gln Gly Asp His Tyr Ile
            85   90   95

Leu Asn Gly Ser Lys Ala Phe Ile Ser Gly Ala Gly Glu Ser Asp Ile
            100   105   110

Tyr Val Val Met Cys Arg Thr Gly Gly Pro Gly Pro Lys Gly Ile Ser
        115   120   125

Cys Ile Val Val Glu Lys Gly Thr Pro Gly Leu Ser Phe Gly Lys Lys
    130   135   140

Glu Lys Lys Val Gly Trp Asn Ser Gln Pro Thr Arg Ala Val Ile Phe
145   150   155   160

Glu Asp Cys Ala Val Pro Val Ala Asn Arg Ile Gly Ser Glu Gly Gln
                165   170   175

Gly Phe Leu Ile Ala Val Arg Gly Leu Asn Gly Gly Arg Ile Asn Ile
            180   185   190

Ala Ser Cys Ser Leu Gly Ala Ala His Ala Ser Val Ile Leu Thr Arg
        195   200   205

Asp His Leu Asn Val Arg Lys Gln Phe Gly Glu Pro Leu Ala Ser Asn
    210   215   220

Gln Tyr Leu Gln Phe Thr Leu Ala Asp Met Ala Thr Arg Leu Val Ala
225   230   235   240

```
Ala Arg Leu Met Val Arg Asn Ala Ala Val Ala Leu Gln Glu Glu Arg
                245             250             255

Lys Asp Ala Val Ala Leu Cys Ser Met Ala Lys Leu Phe Ala Thr Asp
            260             265             270

Glu Cys Phe Ala Ile Cys Asn Gln Ala Leu Gln Met His Gly Gly Tyr
            275             280             285

Gly Tyr Leu Lys Asp Tyr Ala Val Gln Gln Tyr Val Arg Asp Ser Arg
        290             295             300

Val His Gln Ile Leu Glu Glu Leu Phe Trp Gln Gly Pro Gly Val Gln
305             310             315             320

Ser Arg Ser Phe Ala Leu Phe Gly Gly Pro Gln Ile Pro Leu Leu Leu
                325             330             335

Pro Phe Ser Ser Gly Asp Leu Arg Glu Gly
            340             345
```

<210> 1646
<211> 201
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1646
```
Cys Asn Leu Ala Lys Xaa Val Ile Ser Ile Ser Phe Leu Lys Glu Glu
  1           5               10              15

Glu Gln Glu Asp Glu Glu Glu Ile Asp Val Val Ser Val Glu Lys Arg
            20              25              30

Gln Ala Pro Gly Lys Arg Ser Glu Ser Gly Ser Pro Ser Ala Gly Gly
        35              40              45

His Ser Lys Pro Pro His Ser Pro Leu Val Leu Lys Arg Cys His Val
        50              55              60

Ser Thr His Gln His Asn Tyr Ala Ala Pro Pro Ser Thr Arg Lys Asp
65              70              75              80

Tyr Pro Ala Ala Lys Arg Val Lys Leu Asp Ser Val Arg Val Leu Arg
                85              90              95
```

```
Gln Ile Ser Asn Asn Arg Lys Cys Thr Ser Pro Arg Ser Ser Asp Thr
        100             105             110

Glu Glu Asn Val Lys Arg Arg Thr His Asn Val Leu Glu Arg Gln Arg
        115             120             125

Arg Asn Glu Leu Lys Arg Ser Phe Phe Ala Leu Arg Asp Gln Ile Pro
        130             135             140

Glu Leu Glu Asn Asn Glu Lys Ala Pro Lys Val Val Ile Leu Lys Lys
145             150             155             160

Ala Thr Ala Tyr Ile Leu Ser Val Gln Ala Glu Glu Gln Lys Leu Ile
                165             170             175

Ser Glu Glu Asp Leu Leu Arg Lys Arg Arg Glu Gln Leu Lys His Lys
                180             185             190

Leu Glu Gln Leu Arg Asn Ser Cys Ala
                195             200


<210> 1647
<211> 84
<212> PRT
<213> Homo sapiens

<400> 1647
Ser Ile Tyr Asp Ser Ser Lys Lys Asn His Leu Leu Tyr Ala Gly Asp
  1             5               10              15

Met Phe Arg Asp Leu Ser Glu Lys Leu Ala Trp Phe Glu Gly Thr Gln
                20.             25              30

Tyr His Phe Asn Leu Leu Lys Ile Ser Val Phe Leu Leu Phe Phe Cys
            35              40              45

Cys His Cys Gln Ser Ala Ile Phe Phe Thr Ile Leu Leu Lys Tyr Tyr
        50              55              60·

Cys Leu Leu Tyr Leu Phe Asn Val His Ile Leu Lys Lys Ser Ser Leu
65              70              75              80

Tyr Glu Leu Phe


<210> 1648
```

```
<211> 60
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1648
Leu Lys Ile Asn Tyr Ile Lys Ile Ser Phe Phe Val Leu Val Phe Phe
 1               5                  10                  15

Leu Xaa Thr Leu Cys Phe Lys Tyr Lys Xaa Lys Tyr Xaa Ile Tyr Phe
            20                  25                  30

Cys Val Leu Pro Ser Glu Leu Lys Phe Pro Met Xaa Leu Thr Glu Leu
            35                  40                  45

Gly Leu Ala Leu Gly Glu Glu Trp Thr Ala Ala Gly
        50                  55                  60



<210> 1649
<211> 390
<212> PRT
<213> Homo sapiens

<400> 1649
Ala Arg Gly Glu Cys Cys Arg Gly Gly Leu Trp Glu Lys Met Ala Ala
 1               5                  10                  15

Ala Ala Gln Ser Arg Val Val Arg Val Leu Ser Met Ser Arg Ser Ala
            20                  25                  30
```

```
Ile Thr Ala Ile Ala Thr Ser Val Cys His Gly Pro Pro Cys Arg Gln
         35              40              45

Leu His His Ala Leu Met Pro His Gly Lys Gly Gly Arg Ser Ser Val
         50              55              60

Ser Gly Ile Val Ala Thr Val Phe Gly Ala Thr Gly Phe Leu Gly Arg
 65              70              75              80

Tyr Val Val Asn His Leu Gly Arg Met Gly Ser Gln Val Ile Ile Pro
                 85              90              95

Tyr Arg Cys Asp Lys Tyr Asp Ile Met His Leu Arg Pro Met Gly Asp
             100             105             110

Leu Gly Gln Leu Leu Phe Leu Glu Trp Asp Ala Arg Asp Lys Asp Ser
         115             120             125

Ile Arg Arg Val Val Gln His Ser Asn Val Val Ile Asn Leu Ile Gly
         130             135             140

Arg Asp Trp Glu Thr Lys Asn Phe Asp Phe Glu Asp Val Phe Val Lys
145             150             155             160

Ile Pro Gln Ala Ile Ala Gln Leu Ser Lys Glu Ala Gly Val Glu Lys
             165             170             175

Phe Ile His Val Ser His Leu Asn Ala Asn Ile Lys Ser Ser Ser Arg
             180             185             190

Tyr Leu Arg Asn Lys Ala Val Gly Glu Lys Val Val Arg Asp Ala Phe
         195             200             205

Pro Glu Ala Ile Ile Val Lys Pro Ser Asp Ile Phe Gly Arg Glu Asp
         210             215             220

Arg Phe Leu Asn Ser Phe Ala Ser Met His Arg Phe Gly Pro Ile Pro
225             230             235             240

Leu Gly Ser Leu Gly Trp Lys Thr Val Lys Gln Pro Val Tyr Val Val
             245             250             255

Asp Val Ser Lys Gly Ile Val Asn Ala Val Lys Asp Pro Asp Ala Asn
             260             265             270

Gly Lys Ser Phe Ala Phe Val Gly Pro Ser Arg Tyr Leu Leu Phe His
         275             280             285

Leu Val Lys Tyr Ile Phe Ala Val Ala His Arg Leu Phe Leu Pro Phe
         290             295             300
```

```
Pro Leu Pro Leu Phe Ala Tyr Arg Trp Val Ala Arg Val Phe Glu Ile
305             310             315             320

Ser Pro Phe Glu Pro Trp Ile Thr Arg Asp Lys Val Glu Arg Met His
                325             330             335

Ile Thr Asp Met Lys Leu Pro His Leu Pro Gly Leu Glu Asp Leu Gly
                340             345             350

Ile Gln Ala Thr Pro Leu Glu Leu Lys Ala Ile Glu Val Leu Arg Arg
                355             360             365

His Arg Thr Tyr Arg Trp Leu Ser Ala Glu Ile Glu Asp Val Lys Pro
            370             375             380

Ala Lys Thr Val Asn Ile
385             390
```

```
<210> 1650
<211> 99
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (81)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (92)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1650
Gly Ser Met Gly Gln Ala Gln Ser Lys Pro Thr Pro Pro Gly Thr Met
  1             5             10             15

Leu Lys Asn Phe Lys Lys Gly Phe Xaa Gly Asp Tyr Gly Val Thr Met
                20             25             30
```

```
Thr Pro Gly Lys Leu Arg Thr Leu Cys Glu Ile Asp Trp Pro Ala Leu
        35                  40                  45

Glu Val Gly Trp Pro Ser Glu Gly Ser Xaa Asp Arg Ser Leu Val Ser
    50                  55                  60

Lys Val Trp His Lys Val Thr Cys Lys Pro Gly Cys Pro Asp Gln Phe
65              70                  75                  80

Xaa Tyr Ile Asp Thr Trp Leu Gln Leu Val Leu Xaa Pro Ser Tyr Pro
                85                  90                  95

His Gly Gly
```

<210> 1651
<211> 153
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (86)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1651

```
Ala Gly Thr Gly Gly Arg Arg Trp Gly Asn Arg Gly Ser Val Arg Leu
 1               5                  10                  15

Arg Val Arg Gly Ser Asp Trp Ala Glu Gln Ala Ser His Arg Arg Val
            20                  25                  30

Thr Ala Arg Arg Pro Arg Ser Glu Leu Pro Gly Gln Pro Pro Phe Cys
        35                  40                  45

Trp Arg Trp Glu Arg Met Trp Ala Trp Gly Trp Gly Gly Ala Lys Leu
    50                  55                  60

Arg Gly Arg Ala Ala Asp Thr Leu Lys Leu Arg Ala Gly Arg Ala Gln
65              70                  75                  80

Arg Lys Gly Arg Arg Xaa His Gly Tyr Pro Ser Val Arg Gly Ser Ser
                85                  90                  95

Ser Phe Phe Trp Arg Ala Gln Gly Ala Ala Gly Val Met Ser Pro Trp
            100                 105                 110

Val Leu Ala Pro Thr Ala Lys Phe Ala Trp Pro Gly Pro Pro Ser Arg
```

```
        115                    120                         125

Gly Leu Thr Arg His Thr Asp Gln Asn Pro Glu Gln Ala Val Leu Ser
    130                 135                 140

Ile Leu Arg Leu Leu Arg Leu Pro Arg
145                 150



<210> 1652
<211> 312
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (289)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1652
Thr Phe Ile Trp Leu Ile Leu Ile Met Asn Arg Ala Phe Ser Arg Lys
    1                 5                 10                  15

Lys Asp Lys Thr Trp Met His Thr Pro Glu Ala Leu Ser Lys His Phe
                20              25                  30

Ile Pro Tyr Asn Ala Lys Phe Leu Gly Ser Thr Glu Val Glu Gln Pro
            35                  40                  45

Lys Gly Thr Glu Val Val Arg Asp Ala Val Arg Lys Leu Lys Phe Ala
        50                  55                  60

Arg His Ile Lys Lys Ser Glu Gly Gln Lys Ile Pro Lys Val Glu Leu
65                  70                  75                  80

Gln Ile Ser Ile Tyr Gly Val Lys Ile Leu Glu Pro Lys Thr Lys Glu
                85                  90                  95

Val Gln His Asn Cys Gln Leu His Arg Ile Ser Phe Cys Ala Asp Asp
            100                 105                 110

Lys Thr Asp Lys Arg Ile Phe Thr Phe Ile Cys Lys Asp Ser Glu Ser
            115                 120                 125

Asn Lys His Leu Cys Tyr Val Phe Asp Ser Glu Lys Cys Ala Glu Glu
        130                 135                 140

Ile Thr Leu Thr Ile Gly Gln Ala Phe Asp Leu Ala Tyr Arg Lys Phe
145                 150                 155                 160
```

Leu Glu Ser Gly Gly Lys Asp Val Glu Thr Arg Lys Gln Ile Ala Gly
              165   170   175

Leu Gln Lys Arg Ile Gln Asp Leu Glu Thr Glu Asn Met Glu Leu Lys
              180   185   190

Asn Lys Val Gln Asp Leu Glu Asn Gln Leu Arg Ile Thr Gln Val Ser
              195   200   205

Ala Pro Pro Ala Gly Ser Met Thr Pro Lys Ser Pro Ser Thr Asp Ile
   210   215   220

Phe Asp Met Ile Pro Phe Ser Pro Ile Ser His Gln Ser Ser Met Pro
225   230   235   240

Thr Arg Asn Gly Thr Gln Pro Pro Pro Val Pro Ser Arg Ser Thr Glu
              245   250   255

Ile Lys Arg Asp Leu Phe Gly Ala Glu Pro Phe Asp Pro Phe Asn Cys
              260   265   270

Gly Ala Ala Asp Phe Pro Pro Asp Ile Gln Ser Lys Leu Asp Glu Met
              275   280   285

Xaa Glu Gly Phe Lys Met Gly Leu Thr Leu Glu Gly Thr Val Phe Cys
   290   295   300

Leu Asp Pro Leu Asp Ser Arg Cys
305   310

<210> 1653
<211> 50
<212> PRT
<213> Homo sapiens

<400> 1653
Tyr Gly Leu Gly Lys Lys Thr Lys Gln Ala Ser Cys Cys Leu Phe Tyr
   1   5   10   15

Ser Asn Ile Leu Leu His Met Ile Asp Ile Phe Val Val Gly Lys Trp
              20   25   30

Asp Ala Pro Gln Ile Leu Lys Val Leu Ala Asp Cys Ile Leu Ser Leu
              35   40   45

Lys Ile
   50

```
<210> 1654
<211> 117
<212> PRT
<213> Homo sapiens

<400> 1654
Tyr Lys Asn Asp Arg Ser Ser Tyr Glu Arg His Ala Asn Glu Thr Pro
 1               5                   10                  15


Ser Ser Gly Glu Ala Leu Glu Ser Glu Leu Ser Phe Phe Leu Met Ser
            20                  25                  30


Ser Asp Ala Ala Ser Phe Leu Ile Phe Leu Lys Thr Val Cys Phe Cys
        35                  40                  45


Gly Met Tyr Ile Cys Thr Pro Asn Tyr Leu Ala Leu Gly Asn His Ser
    50                  55                  60


Thr Thr Gln Arg Gln Leu Asn Lys Glu Lys Phe Asn Phe Lys Tyr Gln
65                  70                  75                  80


Val Leu Ser Asn Ile Ser Gln Thr Ser Asp Phe Ile Lys Gly Leu Pro
                85                  90                  95


Ala Asn Lys Val His Pro Lys Tyr Thr Gly Glu Lys Ala Arg Leu Leu
            100                 105                 110


Gln Gly Pro Arg Val
            115




<210> 1655
<211> 373
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (144)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (290)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (325)
```

```
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (328)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1655
Val Met Ser Thr Ala Ala Leu Ile Thr Leu Val Arg Ser Gly Gly Asn
 1               5                  10                  15

Gln Val Arg Arg Arg Val Leu Leu Ser Ser Arg Leu Leu Gln Asp Asp
                20                  25                  30

Arg Arg Val Thr Pro Thr Cys His Ser Ser Thr Ser Glu Pro Arg Cys
            35                  40                  45

Ser Arg Phe Asp Pro Asp Gly Ser Gly Ser Pro Ala Thr Trp Asp Asn
    50                  55                  60

Phe Gly Ile Trp Asp Asn Arg Ile Asp Glu Pro Ile Leu Leu Pro Pro
65                  70                  75                  80

Ser Ile Lys Tyr Gly Lys Pro Ile Pro Lys Ile Ser Leu Glu Asn Val
            85                  90                  95

Gly Cys Ala Ser Gln Ile Gly Lys Arg Lys Glu Asn Glu Asp Arg Phe
            100                 105                 110

Asp Phe Ala Gln Leu Thr Asp Glu Val Leu Tyr Phe Ala Val Tyr Asp
        115                 120                 125

Gly His Gly Gly Pro Ala Ala Ala Asp Phe Cys His Thr His Met Xaa
    130                 135                 140

Lys Cys Ile Met Asp Leu Leu Pro Lys Glu Lys Asn Leu Glu Thr Leu
145                 150                 155                 160

Leu Thr Leu Ala Phe Leu Glu Ile Asp Lys Ala Phe Ser Ser His Ala
            165                 170                 175

Arg Leu Ser Ala Asp Ala Thr Leu Leu Thr Ser Gly Thr Thr Ala Thr
            180                 185                 190

Val Ala Leu Leu Arg Asp Gly Ile Glu Leu Val Val Ala Ser Val Gly
            195                 200                 205

Asp Ser Arg Ala Ile Leu Cys Arg Lys Gly Lys Pro Met Lys Leu Thr
    210                 215                 220

Ile Asp His Thr Pro Glu Arg Lys Asp Glu Lys Glu Arg Ile Lys Lys
```

```
           225                      230                      235                      240

       Cys Gly Gly Phe Val Ala Trp Asn Ser Leu Gly Gln Pro His Val Asn
                       245              250                  255

       Gly Arg Leu Ala Met Thr Arg Ser Ile Gly Asp Leu Asp Leu Lys Thr
                       260              265                  270

       Ser Gly Val Ile Ala Glu Pro Glu Thr Lys Arg Ile Lys Leu His His
                       275             · 280                 285

       Ala Xaa Asp Ser Phe Leu Val Leu Thr Thr Asp Gly Ile Asn Phe Met
                       290              295                  300

       Val Asn Ser Gln Glu Ile Cys Asp Phe Val Asn Gln Cys His Asp Pro
       305                      310                  315                  320

       Asn Glu Ala Ala Xaa Ala Val Xaa Glu Gln Ala Ile Gln Tyr Gly Thr
                       325                  330                      335

       Glu Asp Asn Ser Thr Ala Val Val Val Pro Phe Gly Ala Trp Gly Lys
                       340              345                  350

       Tyr Lys Asn Ser Glu Ile Asn Phe Ser Phe Ser Arg Ser Phe Ala Ser
                       355              360                  365

       Ser Gly Arg Trp Ala
       370
```

```
<210> 1656
<211> 82
<212> PRT
<213> Homo sapiens

<400> 1656
Arg Pro Thr Arg Pro Pro Gly Arg Thr Ala Ser Arg Leu Ala Glu Cys
  1               5                  10                  15

Gly Leu Ala Gly Ser Ala Val Ser Gln Arg Glu Gln Thr Ser Pro Ser
                20                  25                  30

Pro Ser Gly Gln Leu Arg Glu Lys Asn Phe Arg Glu Phe Pro Ala Gly
            35              ·40                  45

Lys Ala Val Ala Ala Leu Thr Ala Cys Phe Gly Asp Pro Arg Arg Arg
        50                  55                  60

Arg Arg His Ser Tyr Leu Pro Thr Lys Lys Ala Pro Pro Pro Ser Ser
    65              70                  75                  80
```

Val Ser

<210> 1657
<211> 273
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1657
```
Val Ala Arg Ser Ser Ser Glu Leu Pro Arg Arg Leu Val Cys Ser Lys
 1               5                  10                  15

Leu Arg Ala Asp Pro Gly Arg Leu Thr Pro Asp Ala Cys Xaa Arg Pro
            20                  25                  30

Gly Met Ser Arg Tyr Leu Leu Pro Leu Ser Ala Leu Gly Thr Val Ala
            35                  40                  45

Gly Ala Ala Val Leu Leu Lys Asp Tyr Val Thr Gly Gly Ala Cys Pro
        50                  55                  60

Ser Lys Ala Thr Ile Pro Gly Lys Thr Val Ile Val Thr Gly Ala Asn
65                  70                  75                  80

Thr Gly Ile Gly Lys Gln Thr Ala Leu Glu Leu Ala Arg Arg Gly Gly
                85                  90                  95

Asn Ile Ile Leu Ala Cys Arg Asp Met Glu Lys Cys Glu Ala Ala Ala
            100                 105                 110

Lys Asp Ile Arg Gly Glu Thr Leu Asn His His Val Asn Ala Arg His
            115                 120                 125

Leu Asp Leu Ala Ser Leu Lys Ser Ile Arg Glu Phe Ala Ala Lys Ile
            130                 135                 140

Ile Glu Glu Glu Glu Arg Val Asp Ile Leu Ile Asn Asn Ala Gly Val
145                 150                 155                 160

Met Arg Cys Pro His Trp Thr Thr Glu Asp Gly Phe Glu Met Gln Phe
                165                 170                 175

Gly Val Asn His Leu Gly His Phe Leu Leu Thr Asn Leu Leu Leu Asp
```

```
                 180                    185                     190
     Lys Leu Lys Ala Ser Ala Pro Ser Arg Ile Ile Asn Leu Ser Ser Leu
             195                 200                 205

     Ala His Val Ala Gly His Ile Asp Phe Asp Asp Leu Asn Trp Gln Thr
         210                 215                 220

     Arg Lys Tyr Asn Thr Lys Ala Ala Tyr Cys Gln Ser Lys Leu Ala Ile
     225                 230                 235                 240

     Val Leu Phe Thr Lys Glu Leu Ser Arg Arg Leu Gln Gly Thr Gly Ala
                     245                 250                 255

     Leu Gly Ser Ala Ser Leu Leu Leu Tyr Ser Glu Pro Arg Ala Ala Phe
                 260                 265                 270

     Pro


     <210> 1658
     <211> 240
     <212> PRT
     <213> Homo sapiens

     <400> 1658
     Tyr Leu Cys Ile Leu Gln Ala Ser Lys Leu Glu Asp Leu Arg Val Lys
       1               5                  10                  15

     Leu Lys Lys Glu Gly Tyr Ser Asn Ile Ser Tyr Ile Val Val Asn His
                 20                  25                  30

     Gln Gly Ile Ser Ser Arg Leu Lys Tyr Thr His Leu Lys Asn Lys Val
                 35                  40                  45

     Ser Glu His Ile Pro Val Tyr Gln Gln Glu Glu Asn Gln Thr Asp Val
         50                  55                  60

     Trp Thr Leu Leu Asn Gly Ser Lys Asp Asp Phe Leu Ile Tyr Asp Arg
     65                  70                  75                  80

     Cys Gly Arg Leu Val Tyr His Leu Gly Leu Pro Phe Ser Phe Leu Thr
                     85                  90                  95

     Phe Pro Tyr Val Glu Glu Ala Ile Lys Ile Ala Tyr Cys Glu Lys Lys
                     100                 105                 110

     Cys Gly Asn Cys Ser Leu Thr Thr Leu Lys Asp Glu Asp Phe Cys Lys
                 115                 120                 125
```

```
Arg Val Ser Leu Ala Thr Val Asp Lys Thr Val Glu Thr Pro Ser Pro
    130             135             140

His Tyr His His Glu His His His Asn His Gly His Gln His Leu Gly
145             150             155             160

Ser Ser Glu Leu Ser Glu Asn Gln Gln Pro Gly Ala Pro Asn Ala Pro
            165             170             175

Thr His Pro Ala Pro Pro Gly Leu His His His His Lys His Lys Gly
        180             185             190

Gln His Arg Gln Gly His Pro Glu Asn Arg Asp Met Pro Ala Ser Glu
        195             200             205

Asp Leu Gln Asp Leu Gln Lys Lys Leu Cys Arg Lys Arg Cys Ile Asn
    210             215             220

Gln Leu Leu Cys Lys Leu Pro Thr Asp Ser Glu Leu Ala Pro Arg Ser
225             230             235             240
```

```
<210> 1659
<211> 221
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1659
Xaa Thr Arg Gly Tyr Gly Cys Glu Lys Thr Thr Glu Gly Gly Ser Gln
  1             5               10              15

Gly Pro Leu Pro Ala Leu Ala Ala Gly Ser Thr Phe Pro Val Leu Ala
            20              25              30

Cys Ser Ser Ala Met Ala Pro Lys Gly Ser Ser Lys Gln Gln Ser Glu
            35              40              45

Glu Asp Leu Leu Leu Gln Asp Phe Ser Arg Asn Leu Ser Ala Lys Ser
    50              55              60

Ser Ala Leu Phe Phe Gly Asn Ala Phe Ile Val Ser Ala Ile Pro Ile
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         65                      70                      75                      80
    Trp Leu Tyr Trp Arg Ile Trp His Met Asp Leu Ile Gln Ser Ala Val
                    85                  90                  95

    Leu Tyr Ser Val Met Thr Leu Val Ser Thr Tyr Leu Val Ala Phe Ala
                    100                 105                 110

    Tyr Lys Asn Val Lys Phe Val Leu Lys His Lys Val Ala Gln Lys Arg
                    115                 120                 125

    Glu Asp Ala Val Ser Lys Glu Val Thr Arg Lys Leu Ser Glu Ala Asp
            130                 135                 140

    Asn Arg Lys Met Ser Arg Lys Glu Lys Asp Glu Arg Ile Leu Trp Lys
        145                 150                 155                 160

    Lys Asn Glu Val Ala Asp Tyr Glu Ala Thr Thr Phe Ser Ile Phe Tyr
                    165                 170                 175

    Asn Asn Thr Leu Phe Leu Val Val Val Ile Val Ala Ser Phe Phe Ile
                    180                 185                 190

    Leu Lys Asn Phe Asn Pro Thr Val Asn Tyr Ile Leu Ser Ile Ser Ala
                    195                 200                 205

    Ser Ser Gly Leu Ile Ala Leu Leu Ser Thr Gly Ser Lys
        210                 215                 220
```

<210> 1660
<211> 421
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (140)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (164)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (167)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (321)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (383)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE .
<222> (403)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1660
Glu Leu Gly Ala Gly Gly Asp Gly His Arg Gly Gly Asp Gly Ala Val
 1               5               10                  15

Arg Ser Glu Thr Ala Pro Asp Ser Tyr Lys Val Gln Asp Lys Lys Asn
            20              25              30

Ala Ser Ser Arg Pro Ala Ser Ala Ile Ser Gly Gln Asn Asn Asn His
        35              40              45

Ser Gly Asn Lys Pro Asp Pro Pro Val Leu Arg Val Asp Asp Arg
    50              55              60

Gln Arg Leu Ala Arg Glu Arg Arg Glu Glu Arg Glu Lys Gln Leu Ala
65              70              75                  80

Ala Arg Glu Ile Val Trp Leu Glu Arg Glu Glu Arg Ala Arg Gln His
            85              90                  95

Tyr Glu Lys His Leu Glu Glu Arg Lys Lys Arg Leu Glu Glu Gln Arg
            100             105             110

Gln Lys Glu Glu Arg Arg Arg Ala Ala Val Glu Glu Lys Arg Arg Gln
        115             120             125

Arg Leu Glu Glu Asp Lys Glu Arg His Glu Ala Xaa Val Arg Arg Thr
    130             135             140

Met Glu Arg Ser Gln Lys Pro Lys Gln Lys His Asn Arg Trp Ser Trp
145             150             155             160

Gly Gly Ser Xaa His Gly Xaa Pro Ser Ile His Ser Ala Ala Arg Arg
            165             170             175

Leu Gln Leu Ser Pro Trp Glu Ser Ser Val Val Asn Arg Leu Leu Thr
            180             185             190
```

```
Pro Thr His Ser Phe Leu Ala Arg Ser Lys Ser Thr Ala Ala Leu Ser
        195                 200                 205

Gly Glu Ala Ala Ser Cys Ser Pro Ile Ile Met Pro Tyr Lys Ala Ala
    210                 215                 220

His Ser Arg Asn Ser Met Asp Arg Pro Lys Leu Phe Val Thr Pro Pro
225                 230                 235                 240

Glu Gly Ser Ser Arg Arg Arg Ile Ile His Gly Thr Ala Ser Tyr Lys
                245                 250                 255

Lys Glu Arg Glu Arg Glu Asn Val Leu Phe Leu Thr Ser Gly Thr Arg
            260                 265                 270

Arg Ala Val Ser Pro Ser Asn Pro Lys Ala Arg Gln Pro Ala Arg Ser
        275                 280                 285

Arg Leu Trp Leu Pro Ser Lys Ser Leu Pro His Leu Pro Gly Thr Pro
    290                 295                 300

Arg Pro Thr Ser Ser Leu Pro Pro Gly Ser Val Lys Ala Ala Pro Ala
305                 310                 315                 320

Xaa Val Arg Pro Pro Ser Pro Gly Asn Ile Arg Pro Val Lys Arg Glu
                325                 330                 335

Val Lys Val Glu Pro Glu Lys Lys Asp Pro Glu Lys Glu Pro Gln Lys
            340                 345                 350

Val Ala Asn Glu Pro Ser Leu Lys Gly Arg Ala Pro Leu Val Lys Val
            355                 360                 365

Glu Glu Ala Thr Val Glu Glu Arg Thr Pro Ala Glu Pro Glu Xaa Gly
    370                 375                 380

Leu Leu Leu Gln Pro Trp Pro Gln Leu Gln Pro Arg Pro Gln Leu Gln
385                 390                 395                 400

Pro Arg Xaa Gln Leu Gln Pro Arg Ser Pro Pro Gln Pro Trp Ser Gln
                405                 410                 415

Pro Arg His Pro Leu
            420



<210> 1661
<211> 468
<212> PRT
```

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<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1661
Arg Xaa Thr Thr Ser Gly Thr Leu Asp Phe Asp Glu Val Val Asn Asp
 1               5                  10                  15

Ala Asp Ile Ile Leu Val Glu Phe Tyr Ala Pro Trp Cys Gly His Cys
                20                  25                  30

Lys Lys Leu Ala Pro Glu Tyr Glu Lys Ala Ala Lys Glu Leu Ser Lys
            35                  40                  45

Arg Ser Pro Pro Ile Pro Leu Ala Lys Val Asp Ala Thr Ala Glu Thr
        50                  55                  60

Asp Leu Ala Lys Arg Phe Asp Val Ser Gly Tyr Pro Thr Leu Lys Ile
65                  70                  75                  80

Phe Arg Lys Gly Arg Pro Tyr Asp Tyr Asn Gly Pro Arg Glu Lys Tyr
                85                  90                  95

Gly Ile Val Asp Tyr Met Ile Glu Gln Ser Gly Pro Pro Ser Lys Glu
               100                 105                 110

Ile Leu Thr Leu Lys Gln Val Gln Glu Phe Leu Lys Asp Gly Asp Asp
           115                 120                 125

Val Ile Ile Ile Gly Val Phe Lys Gly Glu Ser Asp Pro Ala Tyr Gln
           130                 135                 140

Gln Tyr Gln Asp Ala Ala Asn Asn Leu Arg Glu Asp Tyr Lys Phe His
145                 150                 155                 160

His Thr Phe Ser Thr Glu Ile Ala Lys Phe Leu Lys Val Ser Gln Gly
               165                 170                 175

Gln Leu Val Val Met Gln Pro Glu Lys Phe Gln Ser Lys Tyr Glu Pro
               180                 185                 190

Arg Ser His Met Met Asp Val Gln Gly Ser Thr Gln Asp Ser Ala Ile
               195                 200                 205

Lys Asp Phe Val Leu Lys Tyr Ala Leu Pro Leu Val Gly His Arg Lys
       210                 215                 220

Val Ser Asn Asp Ala Lys Arg Tyr Thr Arg Arg Pro Leu Val Val Val
```

```
        225                 230                 235                 240

Tyr Tyr Ser Val Asp Phe Ser Phe Asp Tyr Arg Ala Ala Thr Gln Phe
            245                 250                 255

Trp Arg Ser Lys Val Leu Glu Val Ala Lys Asp Phe Pro Glu Tyr Thr
            260                 265                 270

Phe Ala Ile Ala Asp Glu Glu Asp Tyr Ala Gly Glu Val Lys Asp Leu
            275                 280                 285

Gly Leu Ser Glu Ser Gly Glu Asp Val Asn Ala Ala Ile Leu Asp Glu
    290                 295                 300

Ser Gly Lys Lys Phe Ala Met Glu Pro Glu Glu Phe Asp Ser Asp Thr
305                 310                 315                 320

Leu Arg Glu Phe Val Thr Ala Phe Lys Lys Gly Lys Leu Lys Pro Val
            325                 330                 335

Ile Lys Ser Gln Pro Val Pro Lys Asn Asn Lys Gly Pro Val Lys Val
            340                 345                 350

Val Val Gly Lys Thr Phe Asp Ser Ile Val Met Asp Pro Lys Lys Asp
            355                 360                 365

Val Leu Ile Glu Phe Tyr Ala Pro Trp Cys Gly His Cys Lys Gln Leu
    370                 375                 380

Glu Pro Val Tyr Asn Ser Leu Ala Lys Lys Tyr Lys Gly Gln Lys Gly
385                 390                 395                 400

Leu Val Ile Ala Lys Met Asp Ala Thr Ala Asn Asp Val Pro Ser Asp
            405                 410                 415

Arg Tyr Lys Val Glu Gly Phe Pro Thr Ile Tyr Phe Ala Pro Ser Gly
            420                 425                 430

Asp Lys Lys Asn Pro Val Lys Phe Glu Gly Gly Asp Arg Asp Leu Glu
            435                 440                 445

His Leu Ser Lys Phe Ile Glu Glu His Ala Thr Lys Leu Ser Arg Thr
    450                 455                 460

Lys Glu Glu Leu
465
```

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<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (262)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1662
Ala Ala Gly Ile Arg Xaa Arg Arg Gly Gly Cys Lys Met Pro Leu Pro
 1               5                   10                  15


Val Gln Val Phe Asn Leu Gln Gly Ala Val Glu Pro Met Gln Ile Asp
                20                  25                  30


Val Asp Pro Gln Glu Asp Pro Gln Asn Ala Pro Asp Val Asn Tyr Val
            35                  40                  45


Val Glu Asn Pro Ser Leu Asp Leu Glu Gln Tyr Ala Ala Ser Tyr Ser
        50                  55                  60


Gly Leu Met Arg Ile Glu Arg Leu Gln Phe Ile Ala Asp His Cys Pro
65                  70                  75                  80


Thr Leu Arg Val Glu Ala Leu Lys Met Ala Leu Ser Phe Val Gln Arg
                85                  90                  95


Thr Phe Asn Val Asp Met Tyr Glu Glu Ile His Arg Lys Leu Ser Glu
                100                 105                 110


Ala Thr Arg Glu Leu Gln Asn Ala Pro Asp Ala Ile Pro Glu Ser Gly
            115                 120                 125


Val Glu Pro Pro Ala Leu Asp Thr Ala Trp Val Glu Ala Thr Arg Lys
            130                 135                 140


Lys Ala Leu Leu Lys Leu Glu Lys Leu Asp Thr Asp Leu Lys Asn Tyr
145                 150                 155                 160


Lys Gly Asn Ser Ile Lys Glu Ser Ile Arg Arg Gly His Asp Asp Leu
                165                 170                 175


Gly Asp His Tyr Leu Asp Cys Gly Asp Leu Ser Asn Ala Leu Lys Cys
            180                 185                 190


Tyr Ser Arg Ala Arg Asp Tyr Cys Thr Ser Ala Lys His Val Ile Asn
```

```
            195                     200                     205

    Met Cys Leu Asn Val Ile Lys Val Ser Val Tyr Leu Gln Asn Trp Ser
        210             215             220

    His Val Leu Ser Tyr Val Ser Lys Ala Glu Ser Thr Pro Glu Ile Ala
    225             230             235             240

    Glu Gln Arg Gly Glu Arg Asp Ser Gln Thr Gln Ala Ile Leu Thr Lys
                245             250             255

    Leu Lys Cys Ala Ala Xaa Trp Gln Ser Trp Pro Pro Gly Ser Thr Ser
                260             265             270

    Arg Leu Pro Ser Ala Ser Cys Trp Leu Pro Leu Ile Thr Val Thr Ser
            275             280             285

    Leu Ser Cys Cys Pro Pro Ala Thr Trp Pro Ser Thr Val Ala Cys Ala
        290             295             300

    Pro Trp Leu Pro Leu Thr Gly Arg Ser Cys Ser Ala Met Ser Ser Pro
    305             310             315             320

    Ala Ala Pro Ser Ser Cys Ser Trp Ser Trp Ser His Arg Ser Glu Thr
                325             330             335

    Ser Ser Ser Asn Ser Thr Ser Pro Ser Thr Pro His Val Ser Arg Cys
                340             345             350

    Trp Thr Arg
            355



    <210> 1663
    <211> 74
    <212> PRT
    <213> Homo sapiens

    <400> 1663
    Leu Ser His Leu Ser Leu Leu Asn Ser Trp Asp Tyr Arg Cys Met Leu
     1               5              10                      15

    Pro Cys Leu Ala Thr Phe Cys Val Phe Ser Arg Asp Arg Val Ser Pro
                20              25                      30

    Cys Trp Ser Gly Trp Ser Arg Thr Pro Asp Leu Lys Trp Ser Val Trp
                35              40                      45

    Leu Gly Leu Pro Arg Cys Trp Asp Tyr Arg Cys Glu Pro Leu His Leu
        50              55                      60
```

```
Ala Tyr Ile Gly Phe Phe Leu Lys Pro Ile
 65                   70


<210> 1664
<211> 485
<212> PRT
<213> Homo sapiens

<400> 1664
Pro Gly Ser Ile Leu Arg Glu Thr Gly Leu Gly Cys Asp Ala Ala Ala
 1               5                   10                  15

Gly Val Arg Met Ser Tyr Pro Gly Tyr Pro Pro Thr Gly Tyr Pro Pro
             20                  25                  30

Phe Pro Gly Tyr Pro Pro Ala Gly Gln Glu Ser Ser Phe Pro Pro Ser
         35                  40                  45

Gly Gln Tyr Pro Tyr Pro Ser Gly Phe Pro Pro Met Gly Gly Gly Ala
     50                  55                  60

Tyr Pro Gln Val Pro Ser Ser Gly Tyr Pro Gly Ala Gly Gly Tyr Pro
 65                  70                  75                  80

Ala Pro Gly Gly Tyr Pro Ala Pro Gly Gly Tyr Pro Gly Ala Pro Gln
             85                  90                  95

Pro Gly Gly Ala Pro Ser Tyr Pro Gly Val Pro Pro Gly Gln Gly Phe
             100                 105                 110

Gly Val Pro Pro Gly Gly Ala Gly Phe Ser Gly Tyr Pro Gln Pro Pro
         115                 120                 125

Ser Gln Ser Tyr Gly Gly Gly Pro Ala Gln Val Pro Leu Pro Gly Gly
     130                 135                 140

Phe Pro Gly Gly Gln Met Pro Ser Gln Tyr Pro Gly Gly Gln Pro Thr
145                 150                 155                 160

Tyr Pro Ser Gln Pro Ala Thr Val Thr Gln Val Thr Gln Gly Thr Ile
                 165                 170                 175

Arg Pro Ala Ala Asn Phe Asp Ala Ile Arg Asp Ala Glu Ile Leu Arg
             180                 185                 190

Lys Ala Met Lys Gly Phe Gly Thr Asp Glu Gln Ala Ile Val Asp Val
             195                 200                 205
```

Val Ala Asn Arg Ser Asn Asp Gln Arg Gln Lys Ile Lys Ala Ala Phe
    210   215   220

Lys Thr Ser Tyr Gly Lys Asp Leu Ile Lys Asp Leu Lys Ser Glu Leu
225   230   235   240

Ser Gly Asn Met Glu Glu Leu Ile Leu Ala Leu Phe Met Pro Pro Thr
                245   250   255

Tyr Tyr Asp Ala Trp Ser Leu Arg Lys Ala Met Gln Gly Ala Gly Thr
            260   265   270

Gln Glu Arg Val Leu Ile Glu Ile Leu Cys Thr Arg Thr Asn Gln Glu
        275   280   285

Ile Arg Glu Ile Val Arg Cys Tyr Gln Ser Glu Phe Gly Arg Asp Leu
    290   295   300

Glu Lys Asp Ile Arg Ser Asp Thr Ser Gly His Phe Glu Arg Leu Leu
305   310   315   320

Val Ser Met Cys Gln Gly Asn Arg Asp Glu Asn Gln Ser Ile Asn His
            325   330   335

Gln Met Ala Gln Glu Asp Ala Gln Arg Leu Tyr Gln Ala Gly Glu Gly
        340   345   350

Arg Leu Gly Thr Asp Glu Ser Cys Phe Asn Met Ile Leu Ala Thr Arg
        355   360   365

Ser Phe Pro Gln Leu Arg Ala Thr Met Glu Ala Tyr Ser Arg Met Ala
    370   375   380

Asn Arg Asp Leu Leu Ser Ser Val Ser Arg Glu Phe Ser Gly Tyr Val
385   390   395   400

Glu Ser Gly Leu Lys Thr Ile Leu Gln Cys Ala Leu Asn Arg Pro Ala
            405   410   415

Phe Phe Ala Glu Arg Leu Tyr Tyr Ala Met Lys Gly Ala Gly Thr Asp
        420   425   430

Asp Ser Thr Leu Val Arg Ile Val Val Thr Arg Ser Glu Ile Asp Leu
        435   440   445

Val Gln Ile Lys Gln Met Phe Ala Gln Met Tyr Gln Lys Thr Leu Gly
    450   455   460

Thr Met Ile Ala Gly Asp Thr Ser Gly Asp Tyr Arg Arg Leu Leu Leu
465   470   475   480

```
Ala Ile Val Gly Gln
                485


<210> 1665
<211> 235
<212> PRT
<213> Homo sapiens

<400> 1665
Arg Asn Val Ile Glu Ala Cys Leu Gln Thr Gly Thr Arg Phe Leu Val
 1               5                  10                  15

Tyr Thr Ser Ser Met Glu Val Val Gly Pro Asn Thr Lys Gly His Pro
            20                  25                  30

Phe Tyr Arg Gly Asn Glu Asp Thr Pro Tyr Glu Ala Val His Arg His
        35                  40                  45

Pro Tyr Pro Cys Ser Lys Ala Leu Ala Glu Trp Leu Val Leu Glu Ala
    50                  55                  60

Asn Gly Arg Lys Val Arg Gly Gly Leu Pro Leu Val Thr Cys Ala Leu
65                  70                  75                  80

Arg Pro Thr Gly Ile Tyr Gly Glu Gly His Gln Ile Met Arg Asp Phe
                85                  90                  95

Tyr Arg Gln Gly Leu Arg Leu Gly Gly Trp Leu Phe Arg Ala Ile Pro
            100                 105                 110

Ala Ser Val Glu His Gly Arg Val Tyr Val Gly Asn Val Ala Trp Met
        115                 120                 125

His Val Leu Ala Ala Arg Glu Leu Glu Gln Arg Ala Ala Leu Met Gly
    130                 135                 140

Gly Gln Val Tyr Phe Cys Tyr Asp Gly Ser Pro Tyr Arg Ser Tyr Glu
145                 150                 155                 160

Asp Phe Asn Met Glu Phe Leu Gly Pro Leu Arg Thr Ala Ala Gly Gly
                165                 170                 175

Arg Pro Pro Ile Ala Ala Leu Leu Ala Ala Gly Val Pro Gly Cys Pro
            180                 185                 190

Gln Cys Pro Ala Ala Val Ala Ala Ala Ala Thr Gly Ala Leu Arg Thr
        195                 200                 205

Pro Ala Glu Pro Leu His Ala Gly Arg Gly Gln His His Leu His Arg
```

```
          210                    215                    220

Gln His Arg Gln Gly Ser Ala Pro Phe Arg Leu
225                     230                     235


<210> 1666
<211> 292
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1666
Ala Ala Leu Glu Gly Pro Glu Glu Glu Leu Glu Gly Ser Ser Glu Pro
 1               5                   10                  15

Glu Glu Trp Cys Pro Pro Met Pro Glu Arg Ser His Leu Thr Glu Pro
                20                  25                  30

Ser Ser Ser Gly Gly Cys Leu Val Thr Pro Ser Arg Arg Glu Thr Pro
            35                  40                  45

Ser Pro Thr Pro Ser Tyr Gly Gln Gln Ser Thr Ala Thr Leu Thr Pro
        50                  55                  60

Ser Pro Pro Asp Pro Pro Gln Pro Pro Thr Asp Met Pro His Leu His
65                  70                  75                  80

Gln Met Pro Arg Xaa Val Pro Leu Gly Pro Ser Ser Pro Leu Ser Val
                85                  90                  95

Ser Gln Pro Met Leu Gly Ile Arg Glu Ala Arg Pro Ala Gly Leu Gly
            100                 105                 110

Ala Gly Pro Ala Ala Ser Pro His Leu Ser Pro Ser Pro Ala Pro Ser
        115                 120                 125

Thr Ala Ser Ser Ala Pro Gly Arg Thr Trp Gln Gly Asn Gly Glu Met
    130                 135                 140

Thr Pro Pro Leu Gln Gly Pro Arg Ala Arg Phe Arg Lys Lys Pro Lys
145                 150                 155                 160

Ala Leu Pro Tyr Arg Arg Glu Asn Ser Pro Gly Asp Leu Pro Pro Pro
            165                 170                 175
```

```
Pro Leu Pro Pro Pro Glu Glu Glu Ala Ser Trp Ala Leu Glu Leu Arg
            180             185             190

Ala Ala Gly Ser Met Ser Ser Leu Glu Arg Glu Arg Ser Gly Glu Arg
            195             200             205

Lys Ala Val Gln Ala Val Pro Leu Ala Ala Gln Arg Val Leu His Pro
    210             215             220

Asp Glu Glu Ala Trp Leu Pro Tyr Ser Arg Pro Ser Phe Leu Ser Arg
225             230             235             240

Gly Gln Gly Thr Ser Thr Cys Ser Thr Ala Gly Ser Asn Ser Ser Arg
            245             250             255

Gly Ser Ser Ser Ser Arg Gly Ser Arg Gly Pro Gly Arg Ser Arg Ser
            260             265             270

Arg Ser Gln Ser Arg Ser Gln Ser Gln Arg Pro Gly Gln Lys Arg Arg
            275             280             285

Glu Glu Pro Arg
            290



<210> 1667
<211> 521
<212> PRT
<213> Homo sapiens

<400> 1667
Lys Trp Lys Ser Gly Lys Asp Val Asp Ile Ser Leu Leu Val Ser Phe
    1               5               10              15

Asn Lys Met Lys Lys Leu Thr Thr Asp Gly Lys Leu Ile Ala Arg Ala
            20              25              30

Leu Arg Ser Ser Ala Val Val Glu Leu Asp Leu Glu Gly Thr Arg Ile
            35              40              45

Arg Arg Lys Lys Pro Leu Gly Glu Arg Pro Lys Asp Glu Asp Glu Arg
    50              55              60

Thr Val Tyr Val Glu Leu Leu Pro Lys Asn Val Asn His Ser Trp Ile
65              70              75              80

Glu Arg Val Phe Gly Lys Cys Gly Asn Val Val Tyr Ile Ser Ile Pro
            85              90              95

His Tyr Lys Ser Thr Gly Asp Pro Lys Gly Phe Ala Phe Val Glu Phe
```

```
                      100                      105                      110

Glu Thr Lys Glu Gln Ala Ala Lys Ala Ile Glu Phe Leu Asn Asn Pro
        115                 120                 125

Pro Glu Glu Ala Pro Arg Lys Pro Gly Ile Phe Pro Lys Thr Val Lys
        130                 135                 140

Asn Lys Pro Ile Pro Ala Leu Arg Val Val Glu Glu Lys Lys Lys Lys
145                 150                 155                 160

Lys Lys Lys Lys Gly Arg Met Lys Lys Glu Asp Asn Ile Gln Ala Lys
                165                 170                 175

Glu Glu Asn Met Asp Thr Ser Asn Thr Ser Ile Ser Lys Met Lys Arg
                180                 185                 190

Ser Arg Pro Thr Ser Glu Gly Ser Asp Ile Glu Ser Thr Glu Pro Gln
        195                 200                 205

Lys Gln Cys Ser Lys Lys Lys Lys Arg Asp Arg Val Glu Ala Ser
        210                 215                 220

Ser Leu Pro Glu Val Arg Thr Gly Lys Arg Lys Arg Ser Ser Ser Glu
225                 230                 235                 240

Asp Ala Glu Ser Leu Ala Pro Arg Ser Lys Val Lys Lys Ile Ile Gln
                245                 250                 255

Lys Asp Ile Ile Lys Glu Ala Ser Glu Ala Ser Lys Glu Asn Arg Asp
                260                 265                 270

Ile Glu Ile Ser Thr Glu Glu Glu Lys Asp Thr Gly Asp Leu Lys Asp
                275                 280                 285

Ser Ser Leu Leu Lys Thr Lys Arg Lys His Lys Lys Lys His Lys Glu
        290                 295                 300

Arg His Lys Met Gly Glu Glu Val Ile Pro Leu Arg Val Leu Ser Lys
305                 310                 315                 320

Ser Glu Trp Met Asp Leu Lys Lys Glu Tyr Leu Ala Leu Gln Lys Ala
                325                 330                 335

Ser Met Ala Ser Leu Lys Lys Thr Ile Ser Gln Ile Lys Ser Glu Ser
                340                 345                 350

Glu Met Glu Thr Asp Ser Gly Val Pro Gln Asn Thr Gly Met Lys Asn
        355                 360                 365

Glu Lys Thr Ala Asn Arg Glu Glu Cys Arg Thr Gln Glu Lys Val Asn
```

```
            370                     375                      380
    Ala Thr Gly Pro Gln Phe Val Ser Gly Val Ile Val Lys Ile Ile Ser
    385                     390                     395                      400

    Thr Glu Pro Leu Pro Gly Arg Lys Gln Val Arg Asp Thr Leu Ala Ala
                        405                     410                     415

    Ile Ser Glu Val Leu Tyr Val Asp Leu Leu Glu Gly Asp Thr Glu Cys
                    420                     425                     430

    His Ala Arg Phe Lys Thr Pro Glu Asp Ala Gln Ala Val Ile Asn Ala
                435                     440                     445

    Tyr Thr Glu Ile Asn Lys Lys His Cys Trp Lys Leu Glu Ile Leu Ser
                450                     455                     460

    Gly Asp His Glu Gln Arg Tyr Trp Gln Lys Ile Leu Val Asp Arg Gln
    465                     470                     475                      480

    Ala Lys Leu Asn Gln Pro Arg Glu Lys Lys Arg Gly Thr Glu Lys Leu
                        485                     490                     495

    Ile Thr Lys Ala Glu Lys Ile Arg Leu Ala Lys Thr Gln Gln Ala Ser
                        500                     505                     510

    Lys His Ile Arg Phe Ser Glu Tyr Asp
                515                     520


    <210> 1668
    <211> 306
    <212> PRT
    <213> Homo sapiens

    <400> 1668
    Phe Pro Glu Leu Ser Gly Arg Arg Ala Lys Ala Lys Gly Val Trp Arg
     1               5                   10                      15

    Ala Ala Pro Gly Ala Asn Met Pro Arg Tyr Ala Gln Leu Val Met Gly
                    20                  25                      30

    Pro Ala Gly Ser Gly Lys Ser Thr Tyr Cys Ala Thr Met Val Gln His
                35                      40                      45

    Cys Glu Ala Leu Asn Arg Ser Val Gln Val Val Asn Leu Asp Pro Ala
        50                      55                      60

    Ala Glu His Phe Asn Tyr Ser Val Met Ala Asp Ile Arg Glu Leu Ile
    65                      70                      75                      80
```

```
Glu Val Asp Asp Val Met Glu Asp Asp Ser Leu Arg Phe Gly Pro Asn
                85                  90                      95

Gly Gly Leu Val Phe Cys Met Glu Tyr Phe Ala Asn Asn Phe Asp Trp
            100             105             110

Leu Glu Asn Cys Leu Gly His Val Glu Asp Asp Tyr Ile Leu Phe Asp
        115             120             125

Cys Pro Gly Gln Ile Glu Leu Tyr Thr His Leu Pro Val Met Lys Gln
    130             135             140

Leu Val Gln Gln Leu Glu Gln Trp Glu Phe Arg Val Cys Gly Val Phe
145             150             155                     160

Leu Val Asp Ser Gln Phe Met Val Glu Ser Phe Lys Phe Ile Ser Gly
            165             170             175

Ile Leu Ala Ala Leu Ser Ala Met Ile Ser Leu Glu Ile Pro Gln Val
            180             185             190

Asn Ile Met Thr Lys Met Asp Leu Leu Ser Lys Lys Ala Lys Lys Glu
        195             200             205

Ile Glu Lys Phe Leu Asp Pro Asp Met Tyr Ser Leu Leu Glu Asp Ser
    210             215             220

Thr Ser Asp Leu Arg Ser Lys Lys Phe Lys Lys Leu Thr Lys Ala Ile
225             230             235             240

Cys Gly Leu Ile Asp Asp Tyr Ser Met Val Arg Phe Leu Pro Tyr Asp
            245             250             255

Gln Ser Asp Glu Glu Ser Met Asn Ile Val Leu Gln His Ile Asp Phe
            260             265             270

Ala Ile Gln Tyr Gly Glu Asp Leu Glu Phe Lys Glu Pro Lys Glu Arg
    275             280             285

Glu Asp Glu Ser Ser Ser Met Phe Asp Glu Tyr Phe Gln Glu Cys Gln
290             295             300

Asp Glu
305
```

```
<210> 1669
<211> 412
<212> PRT
```

<213> Homo sapiens

<400> 1669

```
Glu Thr Glu Asp Val Met Glu Leu Leu Glu Glu Asp Leu Thr Cys Pro
1               5               10              15

Ile Cys Cys Ser Leu Phe Asp Asp Pro Arg Val Leu Pro Cys Ser His
            20              25              30

Asn Phe Cys Lys Lys Cys Leu Glu Gly Ile Leu Glu Gly Ser Val Arg
            35              40              45

Asn Ser Leu Trp Arg Pro Ala Pro Phe Lys Cys Pro Thr Cys Arg Lys
        50              55              60

Glu Thr Ser Ala Thr Gly Ile Asn Ser Leu Gln Val Asn Tyr Ser Leu
65              70              75              80

Lys Gly Ile Val Glu Lys Tyr Asn Lys Ile Lys Ile Ser Pro Lys Met
                85              90              95

Pro Val Cys Lys Gly His Leu Gly Gln Pro Leu Asn Ile Phe Cys Leu
            100             105             110

Thr Asp Met Gln Leu Ile Cys Gly Ile Cys Ala Thr Arg Gly Glu His
        115             120             125

Thr Lys His Val Phe Cys Ser Ile Glu Asp Ala Tyr Ala Gln Glu Arg
        130             135             140

Asp Ala Phe Glu Ser Leu Phe Gln Ser Phe Glu Thr Trp Arg Arg Gly
145             150             155             160

Asp Ala Leu Ser Arg Leu Asp Thr Leu Glu Thr Ser Lys Arg Lys Ser
                165             170             175

Leu Gln Leu Leu Thr Lys Asp Ser Asp Lys Val Lys Glu Phe Phe Glu
            180             185             190

Lys Leu Gln His Thr Leu Asp Gln Lys Lys Asn Glu Ile Leu Ser Asp
        195             200             205

Phe Glu Thr Met Lys Leu Ala Val Met Gln Ala Tyr Asp Pro Glu Ile
210             215             220

Asn Lys Leu Asn Thr Ile Leu Gln Glu Gln Arg Met Ala Phe Asn Ile
225             230             235             240

Ala Glu Ala Phe Lys Asp Val Ser Glu Pro Ile Val Phe Leu Gln Gln
                245             250             255
```

```
Met Gln Glu Phe Arg Glu Lys Ile Lys Val Ile Lys Glu Thr Pro Leu
        260             265             270

Pro Pro Ser Asn Leu Pro Ala Ser Pro Leu Met Lys Asn Phe Asp Thr
        275             280             285

Ser Gln Trp Glu Asp Ile Lys Leu Val Asp Val Asp Lys Leu Ser Leu
        290             295             300

Pro Gln Asp Thr Gly Thr Phe Ile Ser Lys Ile Pro Trp Ser Phe Tyr
305             310             315             320

Lys Leu Phe Leu Leu Ile Leu Leu Leu Gly Leu Val Ile Val Phe Gly
            325             330             335

Pro Thr Met Phe Leu Glu Trp Ser Leu Phe Asp Asp Leu Ala Thr Trp
        340             345             350

Lys Gly Cys Leu Ser Asn Phe Ser Ser Tyr Leu Thr Lys Thr Ala Asp
        355             360             365

Phe Ile Glu Gln Ser Val Phe Tyr Trp Glu Gln Val Thr Asp Gly Phe
        370             375             380

Phe Ile Phe Asn Glu Arg Phe Lys Asn Phe Thr Leu Val Val Leu Asn
385             390             395             400

Asn Val Ala Glu Phe Val Cys Lys Tyr Lys Leu Leu
            405             410
```

```
<210> 1670
<211> 89
<212> PRT
<213> Homo sapiens

<400> 1670
Pro Glu Glu Ala Leu Glu Pro Glu Ala Met Ala His Tyr Pro Thr Arg
 1               5               10              15

Leu Lys Thr Arg Lys Thr Tyr Ser Trp Val Gly Arg Pro Leu Leu Asp
            20              25              30

Arg Lys Leu His Tyr Gln Thr Tyr Arg Glu Met Cys Val Lys Thr Glu
            35              40              45

Gly Cys Ser Thr Glu Ile His Ile Gln Ile Gly Gln Phe Val Leu Ile
        50              55              60

Glu Gly Asp Asp Asp Glu Asn Pro Tyr Val Ala Lys Leu Leu Glu Leu
```

```
           65                    70                    75                    80
      Phe Glu Asp Asp Ser Asp Pro Pro Pro
                                  85


      <210> 1671
      <211> 218
      <212> PRT
      <213> Homo sapiens

      <400> 1671
      Asp Pro Arg Val Arg Ile Glu Ile Ile Thr Asp Arg Gln Ser Gly Lys
       1                   5                  10                  15

      Lys Arg Gly Phe Gly Phe Val Thr Phe Asp Asp His Asp Pro Val Asp
                      20                  25                  30

      Lys Ile Val Leu Gln Lys Tyr His Thr Ile Asn Gly His Asn Ala Glu
                  35                  40                  45

      Val Arg Lys Ala Leu Ser Arg Gln Glu Met Gln Glu Val Gln Ser Ser
              50                  55                  60

      Arg Ser Gly Arg Gly Gly Asn Phe Gly Phe Gly Asp Ser Arg Gly Gly
      65                  70                  75                  80

      Gly Gly Asn Phe Gly Pro Gly Pro Gly Ser Asn Phe Arg Gly Gly Ser
                      85                  90                  95

      Asp Gly Tyr Gly Ser Gly Arg Gly Phe Gly Asp Gly Tyr Asn Gly Tyr
                     100                 105                 110

      Gly Gly Gly Pro Gly Gly Gly Asn Phe Gly Gly Ser Pro Gly Tyr Gly
                     115                 120                 125

      Gly Gly Arg Gly Gly Tyr Gly Gly Gly Gly Pro Gly Tyr Gly Asn Gln
                     130                 135                 140

      Gly Gly Gly Tyr Gly Gly Gly Tyr Asp Asn Tyr Gly Gly Gly Asn Tyr
      145                 150                 155                 160

      Gly Ser Gly Asn Tyr Asn Asp Phe Gly Asn Tyr Asn Gln Gln Pro Ser
                     165                 170                 175

      Asn Tyr Gly Pro Met Lys Ser Gly Asn Phe Gly Gly Ser Arg Asn Met
                     180                 185                 190

      Gly Gly Pro Tyr Gly Gly Gly Asn Tyr Gly Pro Gly Gly Ser Gly Gly
                     195                 200                 205
```

```
Ser Gly Gly Tyr Gly Gly Arg Ser Arg Tyr
    210                 215
```

<210> 1672
<211> 575
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (186)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (555)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1672

```
Glu Glu Leu Arg Val Arg Glu His Val Thr Gly Gly Ile Cys Gly Gly
  1           5               10              15

Ser Gln Met Met Val Val Leu Leu Gly Ala Thr Thr Leu Val Leu Val
            20              25              30

Ala Val Ala Pro Trp Val Leu Ser Ala Ala Ala Gly Gly Lys Asn Leu
        35              40              45

Lys Ser Pro Gln Lys Val Glu Val Asp Ile Ile Asp Asp Asn Phe Ile
    50              55              60

Leu Arg Trp Asn Arg Ser Asp Glu Ser Val Gly Asn Val Thr Phe Ser
  65              70              75              80

Phe Asp Tyr Gln Lys Thr Gly Met Asp Asn Trp Ile Lys Leu Ser Gly
                85              90              95

Cys Gln Asn Ile Thr Ser Thr Lys Cys Asn Phe Ser Ser Leu Lys Leu
            100             105             110

Asn Val Tyr Glu Glu Ile Lys Leu Arg Ile Arg Ala Glu Lys Glu Asn
            115             120             125

Thr Ser Ser Trp Tyr Glu Val Asp Ser Phe Thr Pro Phe Arg Lys Ala
    130             135             140

Gln Ile Gly Pro Pro Glu Val His Leu Glu Ala Glu Asp Lys Ala Ile
145             150             155             160
```

```
Val Ile His Ile Ser Pro Gly Thr Lys Asp Ser Val Met Trp Ala Leu
            165             170             175

Asp Gly Leu Ser Phe Thr Tyr Ser Leu Xaa Ile Trp Lys Asn Ser Ser
            180             185             190

Gly Val Glu Glu Arg Ile Glu Asn Ile Tyr Ser Arg His Lys Ile Tyr
            195             200             205

Lys Leu Ser Pro Glu Thr Thr Tyr Cys Leu Lys Val Lys Ala Ala Leu
210             215             220

Leu Thr Ser Trp Lys Ile Gly Val Tyr Ser Pro Val His Cys Ile Lys
225             230             235             240

Thr Thr Val Glu Asn Glu Leu Pro Pro Pro Glu Asn Ile Glu Val Ser
            245             250             255

Val Gln Asn Gln Asn Tyr Val Leu Lys Trp Asp Tyr Thr Tyr Ala Asn
            260             265             270

Met Thr Phe Gln Val Gln Trp Leu His Ala Phe Leu Lys Arg Asn Pro
            275             280             285

Gly Asn His Leu Tyr Lys Trp Lys Gln Ile Pro Asp Cys Glu Asn Val
            290             295             300

Lys Thr Thr Gln Cys Val Phe Pro Gln Asn Val Phe Gln Lys Gly Ile
305             310             315             320

Tyr Leu Leu Arg Val Gln Ala Ser Asp Gly Asn Asn Thr Ser Phe Trp
            325             330             335

Ser Glu Glu Ile Lys Phe Asp Thr Glu Ile Gln Ala Phe Leu Leu Pro
            340             345             350

Pro Val Phe Asn Ile Arg Ser Leu Ser Asp Ser Phe His Ile Tyr Ile
            355             360             365

Gly Ala Pro Lys Gln Ser Gly Asn Thr Pro Val Ile Gln Asp Tyr Pro
370             375             380

Leu Ile Tyr Glu Ile Ile Phe Trp Glu Asn Thr Ser Asn Ala Glu Arg
385             390             395             400

Lys Ile Ile Glu Lys Lys Thr Asp Val Thr Val Pro Asn Leu Lys Pro
            405             410             415

Leu Thr Val Tyr Cys Val Lys Ala Arg Ala His Thr Met Asp Glu Lys
            420             425             430
```

```
Leu Asn Lys Ser Ser Val Phe Ser Asp Ala Val Cys Glu Lys Thr Lys
        435             440                 445

Pro Gly Asn Thr Ser Lys Ile Trp Leu Ile Val Gly Ile Cys Ile Ala
    450             455                 460

Leu Phe Ala Leu Pro Phe Val Ile Tyr Ala Ala Lys Val Phe Leu Arg
465                 470                 475                 480

Cys Ile Asn Tyr Val Phe Phe Pro Ser Leu Lys Pro Ser Ser Ser Ile
                485                 490                 495

Asp Glu Tyr Phe Ser Glu Gln Pro Leu Lys Asn Leu Leu Leu Ser Thr
            500             505                 510

Ser Glu Glu Gln Ile Glu Lys Cys Phe Ile Ile Glu Asn Ile Ser Thr
        515             520                 525

Ile Ala Thr Val Glu Glu Thr Asn Gln Thr Asp Glu Asp His Lys Lys
    530             535                 540

Tyr Ser Ser Gln Thr Ser Gln Asp Ser Gly Xaa Tyr Ser Asn Glu Asp
545             550                 555                 560

Glu Ser Glu Ser Lys Thr Ser Glu Glu Leu Gln Gln Asp Phe Val
            565                 570                 575


<210> 1673
<211> 571
<212> PRT
<213> Homo sapiens

<400> 1673
Asp Ala Trp Glu Leu Ser Arg Gly Gly Pro Phe Glu Arg Ile Ala Leu
1               5                   10                  15

Gln Pro Leu Ile Pro Pro Ala Ser Pro Pro Val Glu Ala Gln Ala Arg
                20              25                  30

Phe Ala Ala Phe Ser Leu Cys Leu Ile Thr Met Ser Thr Asn Glu Asn
            35              40                  45

Ala Asn Thr Pro Ala Ala Arg Leu His Arg Phe Lys Asn Lys Gly Lys
        50              55                  60

Asp Ser Thr Glu Met Arg Arg Arg Ile Glu Val Asn Val Glu Leu
65              70                  75                  80
```

Arg Lys Ala Lys Lys Asp Asp Gln Met Leu Lys Arg Arg Asn Val Ser
            85   90   95

Ser Phe Pro Asp Asp Ala Thr Ser Pro Leu Gln Glu Asn Arg Asn Asn
           100   105   110

Gln Gly Thr Val Asn Trp Ser Val Asp Asp Ile Val Lys Gly Ile Asn
           115   120   125

Ser Ser Asn Val Glu Asn Gln Leu Gln Ala Thr Gln Ala Ala Arg Lys
   130   135   140

Leu Leu Ser Arg Glu Lys Gln Pro Pro Ile Asp Asn Ile Ile Arg Ala
145   150   155   160

Gly Leu Ile Pro Lys Phe Val Ser Phe Leu Gly Arg Thr Asp Cys Ser
           165   170   175

Pro Ile Gln Phe Glu Ser Ala Trp Ala Leu Thr Asn Ile Ala Ser Gly
           180   185   190

Thr Ser Glu Gln Thr Lys Ala Val Val Asp Gly Gly Ala Ile Pro Ala
           195   200   205

Phe Ile Ser Leu Leu Ala Ser Pro His Ala His Ile Ser Glu Gln Ala
210   215   220

Val Trp Ala Leu Gly Asn Ile Ala Gly Asp Gly Ser Val Phe Arg Asp
225   230   235   240

Leu Val Ile Lys Tyr Gly Ala Val Asp Pro Leu Leu Ala Leu Leu Ala
           245   250   255

Val Pro Asp Met Ser Ser Leu Ala Cys Gly Tyr Leu Arg Asn Leu Thr
           260   265   270

Trp Thr Leu Ser Asn Leu Cys Arg Asn Lys Asn Pro Ala Pro Pro Ile
           275   280   285

Asp Ala Val Glu Gln Ile Leu Pro Thr Leu Val Arg Leu Leu His His
   290   295   300

Asp Asp Pro Glu Val Leu Ala Asp Thr Cys Trp Ala Ile Ser Tyr Leu
305   310   315   320

Thr Asp Gly Pro Asn Glu Arg Ile Gly Met Val Val Lys Thr Gly Val
           325   330   335

Val Pro Gln Leu Val Lys Leu Leu Gly Ala Ser Glu Leu Pro Ile Val
           340   345   350

Thr Pro Ala Leu Arg Ala Ile Gly Asn Ile Val Thr Gly Thr Asp Glu
        355   360   365

Gln Thr Gln Val Val Ile Asp Ala Gly Ala Leu Ala Val Phe Pro Ser
        370   375   380

Leu Leu Thr Asn Pro Lys Thr Asn Ile Gln Lys Glu Ala Thr Trp Thr
385   390   395   400

Met Ser Asn Ile Thr Ala Gly Arg Gln Asp Gln Ile Gln Gln Val Val
            405   410   415

Asn His Gly Leu Val Pro Phe Leu Val Ser Val Leu Ser Lys Ala Asp
            420   425   430

Phe Lys Thr Gln Lys Glu Ala Val Trp Ala Val Thr Asn Tyr Thr Ser
        435   440   445

Gly Gly Thr Val Glu Gln Ile Val Tyr Leu Val His Cys Gly Ile Ile
        450   455   460

Glu Pro Leu Met Asn Leu Leu Thr Ala Lys Asp Thr Lys Ile Ile Leu
465   470   475   480

Val Ile Leu Asp Ala Ile Ser Asn Ile Phe Gln Ala Ala Glu Lys Leu
            485   490   495

Gly Glu Thr Glu Lys Leu Ser Ile Met Ile Glu Glu Cys Gly Gly Leu
            500   505   510

Asp Lys Ile Glu Ala Leu Gln Asn His Glu Asn Glu Ser Val Tyr Lys
            515   520   525

Ala Ser Leu Ser Leu Ile Glu Lys Tyr Phe Ser Val Glu Glu Glu Glu
            530   535   540

Asp Gln Asn Val Val Pro Glu Thr Thr Ser Glu Gly Tyr Thr Phe Gln
545   550   555   560

Val Gln Asp Gly Ala Pro Gly Thr Phe Asn Phe
                565   570

<210> 1674
<211> 375
<212> PRT
<213> Homo sapiens

<220>
<221> SITE

```
<222> (338)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (340)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (356)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (372)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1674
```

Ser Glu Pro Leu Gly Arg Phe Leu Leu Phe Arg Arg Leu His Ser Val
 1   5   10   15

Pro Arg Gly Ser Ala Leu Cys Ala Met Asp Gly Ile Val Pro Asp Ile
                20   25   30

Ala Val Gly Thr Lys Arg Gly Ser Asp Glu Leu Phe Ser Thr Cys Val
                35   40   45

Thr Asn Gly Pro Phe Ile Met Ser Ser Asn Ser Ala Ser Ala Ala Asn
        50   55   60

Gly Asn Asp Ser Lys Lys Phe Lys Gly Asp Ser Arg Ser Ala Gly Val
65   70   75   80

Pro Ser Arg Val Ile His Ile Arg Lys Leu Pro Ile Asp Val Thr Glu
                85   90   95

Gly Glu Val Ile Ser Leu Gly Leu Pro Phe Gly Lys Val Thr Asn Leu
                100   105   110

Leu Met Leu Lys Gly Lys Asn Gln Ala Phe Ile Glu Met Asn Thr Glu
            115   120   125

Glu Ala Ala Asn Thr Met Val Asn Tyr Tyr Thr Ser Val Thr Pro Val
            130   135   140

Leu Arg Gly Gln Pro Ile Tyr Ile Gln Phe Ser Asn His Lys Glu Leu
145   150   155   160

Lys Thr Asp Ser Ser Pro Asn Gln Ala Arg Ala Gln Ala Ala Leu Gln
                165   170   175

```
Ala Val Asn Ser Val Gln Ser Gly Asn Leu Ala Leu Ala Ala Ser Ala
            180             185             190

Ala Ala Val Asp Ala Gly Met Ala Met Ala Gly Gln Ser Pro Val Leu
            195             200             205

Arg Ile Ile Val Glu Asn Leu Phe Tyr Pro Val Thr Leu Asp Val Leu
    210             215             220

His Gln Ile Phe Ser Lys Phe Gly Thr Val Leu Lys Ile Ile Thr Phe
225             230             235             240

Thr Lys Asn Asn Gln Phe Gln Ala Leu Leu Gln Tyr Ala Asp Pro Val
            245             250             255

Ser Ala Gln His Ala Lys Leu Ser Leu Asp Gly Gln Asn Ile Tyr Asn
            260             265             270

Ala Cys Cys Thr Leu Arg Ile Asp Phe Ser Lys Leu Thr Ser Leu Asn
            275             280             285

Val Lys Tyr Asn Asn Asp Lys Ser Arg Asp Tyr Thr Arg Pro Asp Leu
            290             295             300

Pro Ser Gly Asp Ser Gln Pro Ser Leu Asp Gln Thr Met Ala Ala Ala
305             310             315             320

Phe Gly Ala Pro Gly Ile Ile Ser Ala Ser Pro Tyr Ala Gly Ala Gly
            325             330             335

Phe Xaa Pro Xaa Phe Ala Ile Pro Gln Ala Ala Gly Phe Pro Phe Arg
            340             345             350

Thr Ser Thr Xaa Pro Trp Pro Leu Ala Arg Thr Glu Pro Arg Trp Leu
            355             360             365

Leu Ile Ala Xaa Gly Thr Ala
370             375
```

```
<210> 1675
<211> 193
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (190)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<400> 1675

```
Pro Arg Phe Ser Val Phe Cys Ser Arg Leu Arg Arg Glu Arg Arg Arg
 1               5                   10                  15

Arg Trp Arg Leu Arg Arg Glu Thr Ala Arg Arg Ser Glu Arg Ala Leu
                20                  25                  30

Arg Leu Pro Pro Pro Gln Gln Arg Arg Arg Arg His Arg Ser Ser
            35                  40                  45

Pro Asp Arg Ser Arg Ser Leu Pro Ser Pro Ala Ile Arg Ala Pro Leu
        50                  55                  60

Pro Asp Leu Tyr Pro Phe Gly Thr Met Arg Gly Gly Gly Phe Gly Asp
    65                  70                  75                  80

Arg Asp Arg Asp Arg Asp Arg Gly Gly Phe Gly Ala Arg Gly Gly Gly
                85                  90                  95

Gly Leu Pro Pro Lys Lys Phe Gly Asn Pro Gly Glu Arg Leu Arg Lys
                100             105                 110

Lys Lys Trp Asp Leu Ser Glu Leu Pro Lys Phe Glu Lys Asn Phe Tyr
            115                 120                 125

Val Glu His Pro Glu Val Ala Arg Leu Thr Pro Tyr Glu Val Asp Glu
    130                 135                 140

Leu Arg Arg Lys Lys Glu Ile Thr Val Arg Gly Gly Asp Val Cys Pro
145                 150                 155                 160

Lys Pro Val Phe Ala Phe His His Ala Asn Phe Pro Gln Tyr Val Met
            165                 170                 175

Asp Val Leu Met Asp Ser Arg Thr Leu Gln Asp Asn Ile Xaa Gly Arg
            180                 185                 190

Leu
```

<210> 1676
<211> 365
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (47)

```
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (220)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1676
His Glu Gly Met Phe Pro Pro Phe Lys Val Arg Cys Ser Gly Leu Asp
 1               5                  10                  15

Lys Lys Ala Lys Tyr Ile Leu Leu Met Asp Ile Ile Ala Ala Asp Asp
                20                  25                  30

Cys Arg Tyr Lys Phe His Asn Ser Arg Trp Met Val Ala Gly Xaa Ala
            35                  40                  45

Asp Pro Glu Met Pro Lys Arg Met Tyr Ile His Pro Asp Ser Pro Ala
        50                  55                  60

Thr Gly Glu Gln Trp Met Ser Lys Val Val Thr Phe His Lys Leu Lys
65                  70                  75                  80

Leu Thr Asn Asn Ile Ser Asp Lys His Gly Phe Thr Leu Ala Phe Pro
                85                  90                  95

Ser Asp His Ala Thr Trp Gln Gly Asn Tyr Ser Phe Gly Thr Gln Thr
            100                 105                 110

Ile Leu Asn Ser Met His Lys Tyr Gln Pro Arg Phe His Ile Val Arg
   . 115                 120                 125

Ala Asn Asp Ile Leu Lys Leu Pro Tyr Ser Thr Phe Arg Thr Tyr Leu
    130                 135                 140

Phe Pro Glu Thr Glu Phe Ile Ala Val Thr Ala Tyr Gln Asn Asp Lys
145                 150                 155                 160

Ile Thr Gln Leu Lys Ile Asp Asn Asn Pro Phe Ala Lys Gly Phe Arg
                165                 170                 175

Asp Thr Gly Asn Gly Arg Arg Glu Lys Arg Lys Gln Leu Thr Leu Gln
            180                 185                 190

Ser Met Arg Val Phe Asp Glu Arg His Lys Lys Glu Asn Gly Thr Ser
            195                 200                 205

Asp Glu Ser Ser Ser Glu Gln Ala Ala Phe Asn Xaa Phe Ala Gln Ala
    210                 215                 220

Ser Ser Pro Ala Ala Ser Thr Val Gly Thr Ser Asn Leu Lys Asp Leu
```

```
         225                    230                    235                    240

    Cys Pro Ser Glu Gly Glu Ser Asp Ala Glu Ala Glu Ser Lys Glu Glu
                245                    250                    255·

    His Gly Pro Glu Ala Cys Asp Ala Ala Lys Ile Ser Thr Thr Thr Ser
                260                    265                    270

    Glu Glu Pro Cys Arg Asp Lys Gly Ser Pro Ala Val Lys Ala His Leu
                275                    280                    285

    Phe Ala Ala Glu Arg Pro Arg Asp Ser Gly Arg Leu Asp Lys Ala Ser
        290                    295                    300

    Pro Asp Ser Arg His Ser Pro Ala Thr Ile Ser Ser Ser Thr Arg Gly
    305                    310                    315                    320

    Leu Gly Ala Glu Glu Arg Arg Ser Pro Val Arg Glu Gly Thr Ala Pro
                325                    330                    335

    Ala Lys Val Glu Glu Ala Arg Ala Leu Pro Gly Lys Glu Ala Phe Ala
                340                    345                    350

    Pro Leu Thr Val Gln Thr Asp Ala Ala Ala Ser Leu Phe
                355                    360                    365
```

```
<210> 1677
<211> 668
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (71)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1677
His Met Val Leu Arg Pro Phe Leu Leu Arg Arg Ile Lys Ala Asp Val
    1                   5                   10                  15

Glu Lys Ser Leu Pro Pro Lys Lys Glu Val Lys Ile Tyr Val Gly Leu
                20                  25                  30

Ser Lys Met Gln Arg Glu Trp Tyr Thr Arg Ile Leu Met Lys Asp Ile
```

                35   40   45

Asp Ile Leu Asn Ser Ala Gly Lys Met Asp Lys Met Arg Leu Leu Asn
    50   55   60

Ile Leu Met Gln Leu Xaa Xaa Cys Cys Asn His Pro Tyr Leu Phe Asp
65   70   75   80

Gly Ala Glu Pro Gly Pro Pro Tyr Thr Thr Asp Met His Leu Val Thr
                85   90   95

Asn Ser Gly Lys Met Val Val Leu Asp Lys Leu Leu Pro Lys Leu Lys
                100   105   110

Glu Gln Gly Ser Arg Val Leu Ile Phe Ser Gln Met Thr Arg Val Leu
            115   120   125

Asp Ile Leu Glu Asp Tyr Cys Met Trp Arg Asn Tyr Glu Tyr Cys Arg
    130   135   140

Leu Asp Gly Gln Thr Pro His Asp Glu Arg Gln Asp Ser Ile Asn Ala
145   150   155   160

Tyr Asn Glu Pro Asn Ser Thr Lys Phe Val Phe Met Leu Ser Thr Arg
                165   170   175

Ala Gly Gly Leu Gly Ile Asn Leu Ala Thr Ala Asp Val Val Ile Leu
                180   185   190

Tyr Asp Ser Asp Trp Asn Pro Gln Val Asp Leu Gln Ala Met Asp Arg
        195   200   205

Ala His Arg Ile Gly Gln Thr Lys Thr Val Arg Val Phe Arg Phe Ile
    210   215   220

Thr Asp Asn Thr Val Glu Glu Arg Ile Val Glu Arg Ala Glu Met Lys
225   230   235   240

Leu Arg Leu Asp Ser Ile Val Ile Gln Gln Gly Arg Leu Val Asp Gln
                245   250   255

Asn Leu Asn Lys Ile Gly Lys Asp Glu Met Leu Gln Met Ile Arg His
                260   265   270

Gly Ala Thr His Val Phe Ala Ser Lys Glu Ser Glu Ile Thr Asp Glu
        275   280   285

Asp Ile Asp Gly Ile Leu Glu Arg Gly Ala Lys Lys Thr Ala Glu Met
    290   295   300

Asn Glu Lys Leu Ser Lys Met Gly Glu Ser Ser Leu Arg Asn Phe Thr

```
     305                    310                    315                    320

 Met Asp Thr Glu Ser Ser Val Tyr Asn Phe Glu Gly Glu Asp Tyr Arg
                 325                    330                    335

 Glu Lys Gln Lys Ile Ala Phe Thr Glu Trp Ile Glu Pro Pro Lys Arg
                 340                    345                    350

 Glu Arg Lys Ala Asn Tyr Ala Val Asp Ala Tyr Phe Arg Glu Ala Leu
                 355                    360                    365

 Arg Val Ser Glu Pro Lys Ala Pro Lys Ala Pro Arg Pro Pro Lys Gln
             370                    375                    380

 Pro Asn Val Gln Asp Phe Gln Phe Phe Pro Pro Arg Leu Phe Glu Leu
 385                    390                    395                    400

 Leu Glu Lys Glu Ile Leu Phe Tyr Arg Lys Thr Ile Gly Tyr Lys Val
                 405                    410                    415

 Pro Arg Asn Pro Glu Leu Pro Asn Ala Ala Gln Ala Gln Lys Glu Glu
                 420                    425                    430

 Gln Leu Lys Ile Asp Glu Ala Glu Ser Leu Asn Asp Glu Glu Leu Glu
                 435                    440                    445

 Glu Lys Glu Lys Leu Leu Thr Gln Gly Phe Thr Asn Trp Asn Lys Arg
             450                    455                    460

 Asp Phe Asn Gln Phe Ile Lys Ala Asn Glu Lys Trp Gly Arg Asp Asp
 465                    470                    475                    480

 Ile Glu Asn Ile Ala Arg Glu Val Glu Gly Lys Thr Pro Glu Glu Val
                 485                    490                    495

 Ile Glu Tyr Ser Ala Val Phe Trp Glu Arg Cys Asn Glu Leu Gln Asp
             500                    505                    510

 Ile Glu Lys Ile Met Ala Gln Ile Glu Arg Gly Glu Ala Arg Ile Gln
             515                    520                    525

 Arg Arg Ile Ser Ile Lys Lys Ala Leu Asp Thr Lys Ile Gly Arg Tyr
             530                    535                    540

 Lys Ala Pro Phe His Gln Leu Arg Ile Ser Tyr Gly Thr Asn Lys Gly
 545                    550                    555                    560

 Lys Asn Tyr Thr Glu Glu Glu Asp Arg Phe Leu Ile Cys Met Leu His
                 565                    570                    575

 Lys Leu Gly Phe Asp Lys Glu Asn Val Tyr Asp Glu Leu Arg Gln Cys
```

```
                 580                     585                     590

  Ile Arg Asn Ser Pro Gln Phe Arg Phe Asp Trp Phe Leu Lys Ser Arg
            595                 600                 605

  Thr Ala Met Glu Leu Gln Arg Arg Cys Asn Thr Leu Ile Thr Leu Ile
       610                 615                 620

  Glu Arg Glu Asn Met Glu Leu Glu Glu Lys Glu Lys Ala Glu Lys Lys
  625                 630                 635                 640

  Lys Arg Gly Pro Lys Pro Ser Thr Gln Lys Arg Lys Met Asp Gly Ala
                 645                 650                 655

  Pro Asp Gly Arg Gly Arg Lys Lys Lys Leu Lys Leu
                 660                 665
```

```
<210> 1678
<211> 237
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1678
Gly Arg Lys Arg Pro Leu Pro Xaa Lys Gly Trp Ser Arg Ala Gly Ala
 1               5                  10                  15

Met Trp Ser Ala Gly Arg Gly Gly Ala Ala Trp Pro Val Leu Leu Gly
            20                  25                  30

Leu Leu Leu Ala Leu Leu Val Pro Gly Gly Gly Ala Ala Lys Thr Gly
            35                  40                  45

Ala Glu Leu Val Thr Cys Gly Ser Val Leu Lys Leu Leu Asn Thr His
       50                  55                  60

His Arg Val Arg Leu His Ser His Asp Ile Lys Tyr Gly Ser Gly Ser
 65                  70                  75                  80

Gly Gln Gln Ser Val Thr Gly Val Glu Ala Ser Asp Asp Ala Asn Ser
                 85                  90                  95

Tyr Trp Arg Ile Arg Gly Gly Ser Glu Gly Gly Cys Pro Arg Gly Ser
            100                 105                 110
```

```
Pro Val Arg Cys Gly Gln Ala Val Arg Leu Thr His Val Leu Thr Gly
        115                 120                 125

Lys Asn Leu His Thr His His Phe Pro Ser Pro Leu Ser Asn Asn Gln
        130                 135                 140

Glu Val Ser Ala Phe Gly Glu Asp Gly Glu Gly Asp Asp Leu Asp Leu
145                 150                 155                 160

Trp Thr Val Arg Cys Ser Gly Gln His Trp Glu Arg Glu Ala Ala Val
                165                 170                 175

Arg Phe Gln His Val Gly Thr Ser Val Phe Leu Ser Val Thr Gly Glu
            180                 185                 190

Gln Tyr Gly Ser Pro Ile Arg Gly Gln His Glu Val His Gly Met Pro
        195                 200                 205

Ser Ala Asn Thr His Asn Thr Trp Lys Ala Met Glu Gly Ile Phe Ile
210                 215                 220

Lys Pro Ser Val Glu Pro Ser Ala Gly His Asp Glu Leu
225                 230                 235



<210> 1679
<211> 168
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (101)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (118)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (144)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1679
Glu His Tyr Ser Cys Phe Leu Phe Gln Asn Pro Thr Pro His Pro Ser
  1               5                 10                  15

Cys Asp Ala Met Ser Thr Asn Ile Cys Ser Phe Lys Asp Arg Cys Val
```

```
                    20                    25                    30

Ser  Ile  Leu  Cys  Cys  Lys  Phe  Cys  Lys  Gln  Val  Leu  Ser  Ser  Arg  Gly
          35                    40                    45

Met  Lys  Ala  Val  Leu  Leu  Ala  Asp  Thr  Glu  Ile  Asp  Leu  Phe  Ser  Thr
          50                    55                    60

Asp  Ile  Pro  Pro  Thr  Asn  Ala  Val  Asp  Phe  Thr  Gly  Arg  Cys  Tyr  Phe
     65                    70                    75                    80

Thr  Lys  Ile  Cys  Lys  Cys  Lys  Leu  Lys  Asp  Ile  Ala  Cys  Leu  Lys  Cys
                    85                    90                    95

Gly  Asn  Ile  Val  Xaa  Tyr  His  Val  Ile  Val  Pro  Cys  Ser  Ser  Cys  Leu
               100                   105                   110

Leu  Ser  Cys  Asn  Asn  Xaa  His  Phe  Trp  Met  Phe  His  Ser  Gln  Ala  Val
               115                   120                   125

Tyr  Asp  Ile  Asn  Arg  Leu  Asp  Ser  Thr  Gly  Val  Asn  Val  Leu  Leu  Xaa
          130                   135                   140

Gly  Asn  Leu  Pro  Glu  Ile  Glu  Glu  Ser  Thr  Asp  Glu  Asp  Val  Leu  Asn
145                   150                   155                   160

Ile  Ser  Ala  Glu  Glu  Cys  Ile  Arg
                    165
```

<210> 1680
<211> 519
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (321)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (332)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (333)
<223> Xaa equals any of the naturally occurring L-amino acids

```
<220>
<221> SITE
<222> (337)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (511)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1680
Lys Thr Glu Arg Lys Gln Glu Gly Arg Ser Leu Leu Phe Glu Phe Val
 1               5                  10                  15

Ala Arg Glu Ala Leu Gln Ser Gly Leu Ala Leu Gly Tyr Trp Leu Gly
            20                  25                  30

Pro Met Leu Gly Thr Leu Arg Ala Met Glu Gly Glu Asp Val Glu Asp
            35                  40                  45

Asp Gln Leu Leu Gln Lys Leu Arg Ala Ser Arg Arg Arg Phe Gln Arg
        50                  55                  60

Arg Met Gln Arg Leu Ile Glu Lys Tyr Asn Gln Pro Phe Glu Asp Thr
65                  70                  75                  80

Pro Val Val Gln Met Ala Thr Leu Thr Tyr Glu Thr Pro Gln Gly Leu
                85                  90                  95

Arg Ile Trp Gly Gly Arg Leu Ile Lys Glu Arg Asn Lys Gly Glu Ile
            100                 105                 110

Gln Asp Ser Ser Met Lys Pro Ala Asp Arg Thr Asp Gly Ser Val Gln
            115                 120                 125

Ala Ala Ala Trp Gly Pro Glu Leu Pro Ser His Arg Thr Val Leu Gly
        130                 135                 140

Ala Asp Ser Lys Ser Gly Glu Val Asp Ala Thr Ser Asp Gln Glu Glu
145                 150                 155                 160

Ser Val Ala Trp Ala Leu Ala Pro Ala Val Pro Gln Ser Pro Leu Lys
                165                 170                 175

Asn Glu Leu Arg Arg Lys Tyr Leu Thr Gln Val Asp Ile Leu Leu Gln
            180                 185                 190

Gly Ala Glu Tyr Phe Glu Cys Ala Gly Asn Arg Ala Gly Arg Asp Val
            195                 200                 205

Arg Val Thr Pro Leu Pro Ser Leu Ala Ser Pro Ala Val Pro Ala Pro
```

```
                210                      215                      220

Gly Tyr Cys Ser Arg Ile Ser Gly Lys Ser Pro Gly Asp Pro Ala Lys
225                 230                 235                     240

Pro Ala Ser Ser Pro Arg Glu Trp Asp Pro Leu His Pro Ser Ser Thr
                245                 250                     255

Asp Met Ala Leu Val Pro Arg Asn Asp Ser Leu Ser Leu Gln Glu Thr
                260                 265                     270

Ser Ser Ser Ser Phe Leu Ser Ser Gln Pro Phe Glu Asp Asp Asp Ile
            275                 280                 285

Cys Asn Val Thr Ile Ser Asp Leu Tyr Ala Gly Met Leu His Ser Met
        290                 295                 300

Ser Arg Leu Leu Ser Thr Lys Pro Ser Ser Ile Ile Ser Thr Lys Thr
305                 310                 315                     320

Xaa Ile Met Gln Asn Trp Asn Ser Arg Arg Arg Xaa Xaa Tyr Lys Ser
                325                 330                 335

Xaa Met Asn Lys Thr Tyr Cys Lys Gly Ala Arg Arg Ser Gln Arg Ser
                340                 345                 350

Ser Lys Glu Asn Phe Ile Pro Cys Ser Glu Pro Val Lys Gly Thr Gly
            355                 360                 365

Ala Leu Arg Asp Cys Lys Asn Val Leu Asp Val Ser Cys Arg Lys Thr
            370                 375                 380

Gly Leu Lys Leu Glu Lys Ala Phe Leu Glu Val Asn Arg Pro Gln Ile
385                 390                 395                     400

His Lys Leu Asp Pro Ser Trp Lys Glu Arg Lys Val Thr Pro Ser Lys
                405                 410                     415

Tyr Ser Ser Leu Ile Tyr Phe Asp Ser Ser Ala Thr Tyr Asn Leu Asp
            420                 425                 430

Glu Glu Asn Arg Phe Arg Thr Leu Lys Trp Leu Ile Ser Pro Val Lys
            435                 440                 445

Ile Val Ser Arg Pro Thr Ile Arg Gln Gly His Gly Glu Asn Arg Gln
        450                 455                 460

Arg Glu Ile Glu Ile Arg Phe Asp Gln Leu His Arg Glu Tyr Cys Leu
465                 470                 475                     480

Ser Pro Arg Asn Gln Pro Arg Arg Met Cys Leu Pro Asp Ser Trp Ala
```

```
                      485                 490                 495
    Met Asn Met Tyr Arg Gly Gly Pro Ala Lys Ser Trp Trp Pro Xaa Gly
                    500             505             510

    Leu Lys Thr Arg Lys Leu Ser
                515



    <210> 1681
    <211> 371
    <212> PRT
    <213> Homo sapiens

    <400> 1681
    Val Pro Cys Tyr Arg Arg Val Phe Ile Val Ser Ser Ser Gln Leu Gly
      1               5                  10                  15

    Glu Gln Leu Lys Gln Leu Val Pro Ala Ser Gly Leu Thr Val Met Asp
                    20              25              30

    Leu Glu Ala Glu Gly Thr Cys Leu Arg Phe Ser Pro Leu Met Thr Ala
                35                  40                  45

    Ala Val Leu Gly Thr Arg Gly Glu Asp Val Asp Gln Leu Val Ala Cys
          50                  55                  60

    Ile Glu Ser Lys Leu Pro Val Leu Cys Cys Thr Leu Gln Leu Arg Glu
     65                  70                  75                  80

    Glu Phe Lys Gln Glu Val Glu Ala Thr Ala Gly Leu Leu Tyr Val Asp
                      85                  90                  95

    Asp Pro Asn Trp Ser Gly Ile Gly Val Val Arg Tyr Glu His Ala Asn
                    100                 105                 110

    Asp Asp Lys Ser Ser Leu Lys Ser Asp Pro Glu Gly Glu Asn Ile His
                115                 120                 125

    Ala Gly Leu Leu Lys Lys Leu Asn Glu Leu Glu Ser Asp Leu Thr Phe
          130                 135                 140

    Lys Ile Gly Pro Glu Tyr Lys Ser Met Lys Ser Cys Leu Tyr Val Gly
    145                 150                 155                 160

    Met Ala Ser Asp Asn Val Asp Ala Ala Glu Leu Val Glu Thr Ile Ala
                    165                 170                 175

    Ala Thr Ala Arg Glu Ile Glu Glu Asn Ser Arg Leu Leu Glu Asn Met
                    180                 185                 190
```

```
Thr Glu Val Val Arg Lys Gly Ile Gln Glu Ala Gln Val Glu Leu Gln
        195             200             205

Lys Ala Ser Glu Glu Arg Leu Leu Glu Glu Gly Val Leu Arg Gln Ile
        210             215             220

Pro Val Val Gly Ser Val Leu Asn Trp Phe Ser Pro Val Gln Ala Leu
225             230             235             240

Gln Lys Gly Arg Thr Phe Asn Leu Thr Ala Gly Ser Leu Glu Ser Thr
            245             250             255

Glu Pro Ile Tyr Val Tyr Lys Ala Gln Gly Ala Gly Val Thr Leu Pro
            260             265             270

Pro Thr Pro Ser Gly Ser Arg Thr Lys Gln Arg Leu Pro Gly Gln Lys
        275             280             285

Pro Phe Lys Arg Ser Leu Arg Gly Ser Asp Ala Leu Ser Glu Thr Ser
        290             295             300

Ser Val Ser His Ile Glu Asp Leu Glu Lys Val Glu Arg Leu Ser Ser
305             310             315             320

Gly Pro Glu Gln Ile Thr Leu Glu Ala Ser Ser Thr Glu Gly His Pro
            325             330             335

Gly Ala Pro Ser Pro Gln His Thr Asp Gln Thr Glu Ala Phe Gln Lys
            340             345             350

Gly Val Pro His Pro Glu Asp Asp His Ser Gln Val Glu Gly Pro Glu
            355             360             365

Ser Leu Arg
        370
```

```
<210> 1682
<211> 238
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
```

```
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (145)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (215)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (228)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1682
Ser Xaa Arg Gly Thr Ser Pro Ser Glu Phe Tyr Phe Met Phe Gln Gln
 1               5                  10                  15

Val Arg Val Lys Pro Gln Asp Phe Ala Ala Ile Thr Ile Pro Arg Ser
            20                  25                  30

Arg Gly Glu Ala Arg Val Gly Ala Gly Phe Arg Pro Met Leu Pro Ser
            35                  40                  45

Gln Gly Ala Pro Gln Arg Pro Leu Ser Thr Phe Ser Pro Ala Pro Lys
    50                  55                  60

Ala Thr Leu Ile Xaa Asn Ser Ile Gly Ser Leu Ser Lys Leu Arg Pro
65                  70                  75                  80

Gln Pro Leu Thr Phe Ser Pro Ser Trp Gly Gly Pro Lys Ser Leu Pro
                85                  90                  95

Val Pro Ala Pro Pro Gly Glu Met Gly Thr Thr Pro Ser Ala Pro Pro
            100                 105                 110

Gln Arg Asn Arg Arg Lys Ser Val His Arg Val Leu Ala Glu Leu Asp
            115                 120                 125

Asp Glu Ser Glu Pro Pro Glu Asn Pro Pro Pro Val Leu Met Glu Pro
    130                 135                 140

Xaa Lys Lys Leu Arg Val Asp Lys Ala Pro Leu Thr Pro Thr Gly Asn
145                 150                 155                 160

Arg Arg Gly Arg Pro Arg Lys Tyr Pro Val Ser Ala Pro Met Ala Pro
                165                 170                 175
```

```
Pro Ala Val Gly Gly Gly Glu Pro Cys Ala Ala Pro Cys Cys Cys Leu
            180             185             190

Pro Gln Glu Glu Thr Val Ala Trp Val Gln Cys Asp Gly Cys Asp Val
            195             200             205

Trp Phe His Val Ala Cys Xaa Gly Cys Ser Ile Gln Ala Ala Arg Glu
    210             215             220

Ala Asp Phe Xaa Cys Pro Gly Cys Arg Ala Gly Ile Gln Thr
225             230             235
```

```
<210> 1683
<211> 66
<212> PRT
<213> Homo sapiens

<400> 1683
Met Ile Ala Thr Glu Thr Gln Ser Ser Phe Phe Ala Arg Val Phe Trp
 1               5               10              15

Gly Phe Cys Pro Lys Ile Tyr Pro Gly His Ser Ile Thr Ala Val Leu
            20              25              30

Asp Val Tyr Pro Lys Leu Pro His His Pro Ser Thr His Ser Cys Thr
            35              40              45

Phe Ile Tyr Leu Phe Cys Ser Ser Leu Gly Asp Arg Val Arg Leu Arg
    50              55              60

Leu Gly
 65
```

```
<210> 1684
<211> 119
<212> PRT
<213> Homo sapiens

<400> 1684
Trp Pro Leu Glu Phe Val Trp Pro Pro Arg Glu Arg Glu Pro Gly
 1               5               10              15

Asn Phe Ser Thr Glu Lys Gly Glu Ala Phe Gly Leu Cys Arg Val Arg
            20              25              30

Val Ser Lys Cys Pro Ala Pro Ala Gly Met Glu Asp Pro Gln Ser Lys
```

```
                      35                    40                        45
   Glu Pro Ala Gly Glu Ala Val Ala Leu Ala Leu Leu Glu Ser Pro Arg
            50                  55                    60

   Pro Glu Gly Gly Glu Glu Pro Pro Arg Pro Ser Pro Glu Glu Thr Gln
        65                  70              75                      80

   Gln Cys Lys Phe Asp Gly Gln Glu Thr Lys Gly Ser Lys Phe Ile Thr
                    85                  90                      95

   Ser Ser Ala Ser Asp Phe Ser Asp Pro Val Tyr Lys Glu Ile Ala Ile
                    100             105             110

   Thr Asn Gly Cys Ile Asn Arg
                115
```

```
<210> 1685
<211> 91
<212> PRT
<213> Homo sapiens

<400> 1685
Ile Val Phe Leu Pro Glu Asp Ser Tyr Leu His Val Ser Gln Gly Leu
 1              5                  10                      15

Gln Phe Phe Tyr Lys Phe Pro Tyr Pro Lys Phe Arg Ile His Val Lys
                20                  25                  30

Tyr Phe Phe Gly Ala Lys Val Leu His Ser Trp Tyr Leu Leu Asp Trp
            35                  40                  45

Lys Ser Val Ala Arg Cys Cys Leu Lys Leu Pro Tyr Cys Phe Phe Ile
        50                  55                  60

Leu Tyr Leu Ala Leu Trp Leu Leu Asn Phe Leu Phe Leu Phe Glu Val
    65                  70                  75                      80

Ser Phe Lys Phe Ala Pro Met Leu Asn Tyr Leu
                85                  90
```

```
<210> 1686
<211> 141
<212> PRT
<213> Homo sapiens

<400> 1686
```

```
Glu Ala Val Ala Glu Val Ser Ser Leu Phe Pro Arg Leu Phe Gln Ile
 1               5               10              15

Phe Val Ile Ala Val Val Ser Leu Val Ile Leu Pro Arg Ile Val Ile
            20              25              30

Phe Arg Arg Met Ala Cys Tyr Asn Cys Gly Arg Gly Gly His Ile Ala
        35              40              45

Lys Asp Cys Lys Glu Pro Lys Arg Glu Arg Glu Gln Cys Cys Tyr Asn
        50              55              60

Cys Gly Lys Pro Gly His Leu Ala Arg Asp Cys Asp His Ala Asp Glu
 65              70              75              80

Gln Lys Cys Tyr Ser Cys Gly Glu Phe Gly His Ile Gln Lys Asp Cys
                85              90              95

Thr Lys Val Lys Cys Tyr Arg Cys Gly Glu Thr Gly His Val Ala Ile
            100             105             110

Asn Cys Ser Lys Thr Ser Glu Val Asn Cys Tyr Arg Cys Gly Glu Ser
        115             120             125

Gly His Leu Ala Arg Glu Cys Thr Ile Glu Ala Thr Ala
    130             135             140
```

```
<210> 1687
<211> 83
<212> PRT
<213> Homo sapiens

<400> 1687
Phe Trp Ile Pro Trp Trp Arg Lys Ile Lys His Ser Gly Leu Ala Ala
 1               5               10              15

Asn Asp Ala Ser Val Thr Ala Gly Val Phe Met Ser Ser Arg Gly His
            20              25              30

Ser Thr Leu Pro Arg Thr Leu Met Ala Pro Arg Met Ile Ser Glu Gly
        35              40              45

Asp Ile Gly Gly Ile Ala Gln Ile Thr Ser Ser Leu Phe Leu Gly Arg
        50              55              60

Gly Ser Val Ala Ser Asn Arg His Leu Leu Gln Ala Arg Gly His His
 65              70              75              80

Leu His Cys
```

```
<210> 1688
<211> 153
<212> PRT
<213> Homo sapiens

<400> 1688
Arg Arg His Pro Ala Val Val Ala Glu Val Ser Pro Ala Tyr Phe Leu
1               5                   10                  15

Phe Pro Ser Glu Arg Ala Ala Ala Leu Ala Ala Cys Ala Ala Met Ala
            20                  25                  30

Lys Ile Lys Ala Arg Asp Leu Arg Gly Lys Lys Lys Glu Glu Leu Leu
        35                  40                  45

Lys Gln Leu Asp Asp Leu Lys Val Glu Leu Ser Gln Leu Arg Val Ala
        50                  55                  60

Lys Val Thr Gly Gly Ala Ala Ser Lys Leu Ser Lys Ile Arg Val Val
65                  70                  75                  80

Arg Lys Ser Ile Ala Arg Val Leu Thr Val Ile Asn Gln Thr Gln Lys
                85                  90                  95

Glu Asn Leu Arg Lys Phe Tyr Lys Gly Lys Lys Tyr Lys Pro Leu Asp
            100                 105                 110

Leu Arg Pro Lys Lys Thr Arg Ala Met Arg Arg Arg Leu Asn Lys His
        115                 120                 125

Glu Glu Asn Leu Lys Thr Lys Lys Gln Gln Arg Lys Glu Arg Leu Tyr
        130                 135                 140

Pro Leu Arg Lys Tyr Ala Val Lys Ala
145                 150


<210> 1689
<211> 130
<212> PRT
<213> Homo sapiens

<400> 1689
Gly Gly Gly Asp Ala Glu Met Gly Ala Ala Ala Ala Glu Ala Asp Arg
1               5                   10                  15
```

```
Thr Leu Phe Val Gly Asn Leu Glu Thr Lys Val Thr Glu Glu Leu Leu
            20                  25                  30

Phe Glu Leu Phe His Gln Ala Gly Pro Val Ile Lys Val Lys Ile Pro
            35                  40                  45

Lys Asp Lys Asp Gly Lys Pro Lys Gln Phe Ala Phe Val Asn Phe Lys
        50                  55                  60

His Glu Val Ser Val Pro Tyr Ala Met Asn Leu Leu Asn Gly Ile Lys
65                  70                  75                  80

Leu Tyr Gly Arg Pro Ile Lys Ile Gln Phe Arg Ser Gly Ser Ser His
                85                  90                  95

Ala Pro Gln Asp Val Ser Leu Ser Tyr Pro Gln His His Val Gly Asn
            100                 105                 110

Ser Ser Pro Thr Ser Thr Ser Pro Ser Ala Gly Thr Lys Gly Leu Trp
        115                 120                 125

Ile Thr
    130
```

```
<210> 1690
<211> 172
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (110)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1690
Arg Pro Ser Leu Glu Val Leu Phe Thr Val Ile Leu Thr Lys Ile Thr
 1               5                   10                  15

Tyr Cys Pro Pro Glu Tyr Gln Val Leu Gly Asp Thr Ser Ser Ser Cys
            20                  25                  30

Cys Leu Gln Ser Ser Tyr Gln Glu Ala Arg Cys Thr Gly Phe Leu Trp
        35                  40                  45

Phe Leu Gln Glu Pro Pro Thr Leu Ser Val Phe Trp Pro Arg Ser Gly
        50                  55                  60

Val Asn Pro Leu Val Ser Ala Phe Glu Leu Asp Thr Cys Ala Phe Ser
65                  70                  75                  80
```

Ser Val Asn Thr Ala Leu Phe Gly Gly Val Ser Ser Ser Pro Gln Pro
                85   90   95

Glu Leu Leu Asn Ser Lys Pro Lys Leu Val Ser Ala Glu Xaa Arg Phe
            100   105   110

Gln Asp Ser Pro Val Ser Ile Cys Gly Asp Leu Gln Ile Arg Gln Ser
            115   120   125

Ser Phe Pro Ala Ser Gly Val Leu Ala Pro Glu Pro Ser Leu Arg Leu
            130   135   140

Val Leu Leu Asp Val Leu Ile Ser Asp His Tyr Pro Pro Tyr Ala Ser
145   150   155   160

His Arg Pro Arg Glu Asn Arg His Gln Asn Leu Gly
                165   170

<210> 1691
<211> 272
<212> PRT
<213> Homo sapiens

<400> 1691
Asn Ser Arg Val His Pro Arg Arg Pro Val Thr Ala Glu Lys Met Ala
    1   5   10   15

Val Leu Ala Pro Leu Ile Ala Leu Val Tyr Ser Val Pro Arg Leu Ser
                20   25   30

Arg Trp Leu Ala Gln Pro Tyr Tyr Leu Leu Ser Ala Leu Leu Ser Ala
            35   40   45

Ala Phe Leu Leu Val Arg Lys Leu Pro Pro Leu Cys His Gly Leu Pro
        50   55   60

Thr Gln Arg Glu Asp Gly Asn Pro Cys Asp Phe Asp Trp Arg Glu Val
    65   70   75   80

Glu Ile Leu Met Phe Leu Ser Ala Ile Val Met Met Lys Asn Arg Arg
                85   90   95

Ser Met Phe Leu Met Thr Cys Lys Pro Pro Leu Tyr Met Gly Pro Glu
            100   105   110

Tyr Ile Lys Tyr Phe Asn Asp Lys Thr Ile Asp Glu Glu Leu Glu Arg
            115   120   125

```
Asp Lys Arg Val Thr Trp Ile Val Glu Phe Phe Ala Asn Trp Ser Asn
    130             135             140

Asp Cys Gln Ser Phe Ala Pro Ile Tyr Ala Asp Leu Ser Leu Lys Tyr
145             150             155             160

Asn Cys Thr Gly Leu Asn Phe Gly Lys Val Asp Val Gly Arg Tyr Thr
            165             170             175

Asp Val Ser Thr Arg Tyr Lys Val Ser Thr Ser Pro Leu Thr Lys Gln
            180             185             190

Leu Pro Thr Leu Ile Leu Phe Gln Gly Gly Lys Glu Ala Met Arg Arg
        195             200             205

Pro Gln Ile Asp Lys Lys Gly Arg Ala Val Ser Trp Thr Phe Ser Glu
    210             215             220

Glu Asn Val Ile Arg Glu Phe Asn Leu Asn Glu Leu Tyr Gln Arg Ala
225             230             235             240

Lys Lys Leu Ser Lys Ala Gly Asp Asn Ile Pro Glu Glu Gln Pro Val
            245             250             255

Ala Ser Thr Pro Thr Thr Val Ser Asp Gly Glu Asn Lys Lys Asp Lys
            260             265             270
```

```
<210> 1692
<211> 366
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1692
Gly Lys Arg Thr Gly Arg Ala Xaa Ala Ser Ser Gly Arg Arg Gly Glu
1               5               10              15

Gly Gly Trp Trp Arg Leu Pro Arg Ser Pro Ser Leu Pro Ala Val Pro
            20              25              30

Thr Pro Gly Thr Met Phe Pro Ala Gly Pro Pro Ser His Ser Leu Leu
        35              40              45
```

```
Arg Leu Pro Leu Leu Gln Leu Leu Leu Val Val Gln Ala Val Gly
    50              55              60

Arg Gly Leu Gly Arg Ala Ser Pro Ala Gly Gly Pro Leu Glu Asp Val
65              70              75              80

Val Ile Glu Arg Tyr His Ile Pro Arg Ala Cys Pro Arg Glu Val Gln
            85              90              95

Met Gly Asp Phe Val Arg Tyr His Tyr Asn Gly Thr Phe Glu Asp Gly
            100             105             110

Lys Lys Phe Asp Ser Ser Tyr Asp Arg Asn Thr Leu Val Ala Ile Val
        115             120             125

Val Gly Val Gly Arg Leu Ile Thr Gly Met Asp Arg Gly Leu Met Gly
    130             135             140

Met Cys Val Asn Glu Arg Arg Leu Ile Val Pro Pro His Leu Gly
145             150             155             160

Tyr Gly Ser Ile Gly Leu Ala Gly Leu Ile Pro Pro Asp Ala Thr Leu
            165             170             175

Tyr Phe Asp Val Val Leu Leu Asp Val Trp Asn Lys Glu Asp Thr Val
            180             185             190

Gln Val Ser Thr Leu Leu Arg Pro Pro His Cys Pro Arg Met Val Gln
        195             200             205

Asp Gly Asp Phe Val Arg Tyr His Tyr Asn Gly Thr Leu Leu Asp Gly
    210             215             220

Thr Ser Phe Asp Thr Ser Tyr Ser Lys Gly Gly Thr Tyr Asp Thr Tyr
225             230             235             240

Val Gly Ser Gly Trp Leu Ile Lys Gly Met Asp Gln Gly Leu Leu Gly
            245             250             255

Met Cys Pro Gly Glu Arg Arg Lys Ile Ile Ile Pro Pro Phe Leu Ala
            260             265             270

Tyr Gly Glu Lys Gly Tyr Gly Glu Gly Gly Gln Gly His Lys Gly Lys
            275             280             285

Phe Arg Arg Arg Gly Lys Asn Gln Ala Ser Thr Tyr Ser Cys Ser Gly
    290             295             300

Cys Ile Leu His Glu Gly Ile Gln Pro Arg Thr Gln Gly Gly Met Lys
305             310             315             320
```

Ser Thr Leu Gly Ala Thr Lys Lys Gly Cys Phe Gly Arg Ala Trp Trp
            325   330   335

Leu Thr Leu Val Ile Pro Ala Leu Trp Glu Ala Lys Ala Gly Gly Ser
            340   345   350

Arg Gly Gln Glu Ile Glu Thr Thr Val Lys Pro Arg Leu Tyr
            355   360   365

<210> 1693
<211> 361
<212> PRT
<213> Homo sapiens

<400> 1693
Leu Pro Gln Ser Arg Trp Asn Lys Ser Ser Thr Pro Asp Gly Val Pro
 1   5   10   15

Thr Leu Cys Cys Arg Asn Glu Ala Arg Gln Gln Ile Ser Ile Ser Arg
            20   25   30

Met Trp Gly Leu Lys Val Leu Leu Leu Pro Val Val Ser Phe Ala Leu
            35   40   45

Tyr Pro Glu Glu Ile Leu Asp Thr His Trp Glu Leu Trp Lys Lys Thr
    50   55   60

His Arg Lys Gln Tyr Asn Asn Lys Val Asp Glu Ile Ser Arg Arg Leu
 65   70   75   80

Ile Trp Glu Lys Asn Leu Lys Tyr Ile Ser Ile His Asn Leu Glu Ala
            - 85   90   95

Ser Leu Gly Val His Thr Tyr Glu Leu Ala Met Asn His Leu Gly Asp
            100   105   110

Met Thr Ser Glu Glu Val Val Gln Lys Met Thr Gly Leu Lys Val Pro
            115   120   125

Leu Ser His Ser Arg Ser Asn Asp Thr Leu Tyr Ile Pro Glu Trp Glu
    130   135   140

Gly Arg Ala Pro Asp Ser Val Asp Tyr Arg Lys Lys Gly Tyr Val Thr
145   150   155   160

Pro Val Lys Asn Gln Gly Gln Cys Gly Ser Cys Trp Ala Phe Ser Ser
            165   170   175

```
Val Gly Ala Leu Glu Gly Gln Leu Lys Lys Lys Thr Gly Lys Leu Leu
        180                 185                 190

Asn Leu Ser Pro Gln Asn Leu Val Asp Cys Val Ser Glu Asn Asp Gly
        195                 200                 205

Cys Gly Gly Gly Tyr Met Thr Asn Ala Phe Gln Tyr Val Gln Lys Asn
    210                 215                 220

Arg Gly Ile Asp Ser Glu Asp Ala Tyr Pro Tyr Val Gly Gln Glu Glu
225                 230                 235                 240

Ser Cys Met Tyr Asn Pro Thr Gly Lys Ala Ala Lys Cys Arg Gly Tyr
                245                 250                 255

Arg Glu Ile Pro Glu Gly Asn Glu Lys Ala Leu Lys Arg Ala Val Ala
            260                 265                 270

Arg Val Gly Pro Val Ser Val Ala Ile Asp Ala Ser Leu Thr Ser Phe
        275                 280                 285

Gln Phe Tyr Ser Lys Gly Val Tyr Tyr Asp Glu Ser Cys Asn Ser Asp
    290                 295                 300

Asn Leu Asn His Ala Val Leu Ala Val Gly Tyr Gly Ile Gln Lys Gly
305                 310                 315                 320

Asn Lys His Trp Ile Ile Lys Asn Ser Trp Gly Glu Asn Trp Gly Asn
                325                 330                 335

Lys Gly Tyr Ile Leu Met Ala Arg Asn Lys Asn Asn Ala Cys Gly Ile
                340                 345                 350

Ala Asn Leu Ala Ser Phe Pro Lys Met
            355                 360
```

```
<210> 1694
<211> 282
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1694
Pro Arg Val Arg Arg Gly Pro Arg Val Ser Ser Met Ala Ser Ala Asp
    1               5               10              15
```

```
Ser Arg Arg Xaa Ala Asp Gly Gly Gly Ala Gly Gly Thr Phe Gln Pro
            20              25                  30

Tyr Leu Asp Thr Leu Arg Gln Glu Leu Gln Gln Thr Asp Pro Thr Leu
            35              40                  45

Leu Ser Val Val Val Ala Val Leu Ala Val Leu Leu Thr Leu Val Phe
        50              55                  60

Trp Lys Leu Ile Arg Ser Arg Arg Ser Ser Gln Arg Ala Val Leu Leu
65                  70                  75                  80

Val Gly Leu Cys Asp Ser Gly Lys Thr Leu Leu Phe Val Arg Leu Leu
                85                  90                  95

Thr Gly Leu Tyr Arg Asp Thr Gln Thr Ser Ile Thr Asp Ser Cys Ala
                100                 105                 110

Val Tyr Arg Val Asn Asn Asn Arg Gly Asn Ser Leu Thr Leu Ile Asp
        115                 120                 125

Leu Pro Gly His Glu Ser Leu Arg Leu Gln Phe Leu Glu Arg Phe Lys
    130                 135                 140

Ser Ser Ala Arg Ala Ile Val Phe Val Val Asp Ser Ala Ala Phe Gln
145                 150                 155                 160

Arg Glu Val Lys Asp Val Ala Glu Phe Leu Tyr Gln Val Leu Ile Asp
                165                 170                 175

Ser Met Gly Leu Lys Asn Thr Pro Ser Phe Leu Ile Ala Cys Asn Lys
            180                 185                 190

Gln Asp Ile Ala Met Ala Lys Ser Ala Lys Leu Ile Gln Gln Gln Leu
            195                 200                 205

Glu Lys Glu Leu Asn Thr Leu Arg Val Thr Arg Ser Ala Ala Pro Ser
210                 215                 220

Thr Leu Asp Ser Ser Ser Thr Ala Pro Ala Gln Leu Gly Lys Lys Gly
225                 230                 235                 240

Lys Glu Phe Glu Phe Ser Gln Leu Pro Leu Lys Val Glu Phe Leu Glu
                245                 250                 255

Cys Ser Ala Lys Gly Gly Arg Gly Asp Val Gly Ser Ala Asp Ile Gln
            260                 265                 270

Asp Leu Glu Lys Trp Leu Ala Lys Ile Ala
        275                 280
```

```
<210> 1695
<211> 232
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (113)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1695
Gly Val Asp Thr Ser Pro Phe Ala Lys Ser Leu Gly His Ser Arg Gly
  1               5                  10                  15

Glu Ala Asp Leu Phe Asp Ser Gly Asp Ile Phe Ser Thr Gly Thr Gly
               20                  25                  30

Ser Gln Ser Val Glu Arg Thr Lys Pro Lys Ala Lys Ile Ala Glu Asn
            35                  40                  45

Pro Ala Asn Pro Pro Val Gly Gly Lys Ala Lys Ser Pro Met Phe Pro
          50                  55                  60

Ala Leu Gly Glu Ala Ser Ser Asp Asp Asp Leu Phe Gln Ser Ala Lys
  65                  70                  75                  80

Pro Lys Pro Ala Lys Lys Thr Asn Pro Phe Pro Leu Leu Glu Asp Glu
               85                  90                  95

Asp Asp Leu Phe Thr Asp Gln Lys Val Lys Lys Asn Glu Thr Lys Ser
              100                 105                 110

Xaa Ser Gln Gln Asp Val Ile Leu Thr Thr Gln Asp Ile Phe Glu Asp
              115                 120                 125

Asp Ile Phe Ala Thr Glu Ala Ile Lys Pro Ser Gln Lys Thr Arg Glu
              130                 135                 140

Lys Glu Lys Thr Leu Glu Ser Asn Leu Phe Asp Asp Asn Ile Asp Ile
145                 150                 155                 160

Phe Ala Asp Leu Thr Val Lys Pro Lys Glu Lys Ser Lys Lys Lys Val
              165                 170                 175

Glu Ala Lys Ser Ile Phe Asp Asp Met Asp Asp Ile Phe Ser Ser
              180                 185                 190

Gly Ile Gln Ala Lys Thr Thr Lys Pro Lys Ser Arg Ser Ala Gln Ala
```

```
              195                    200                    205

    Ala Pro Glu Pro Arg Phe Glu His Lys Val Ser Asn Ile Phe Asp Asp
            210                215                220

    Pro Leu Asn Ala Phe Gly Gly Gln
    225                230
```

```
<210> 1696
<211> 123
<212> PRT
<213> Homo sapiens

<400> 1696
Arg Gly Gly Ser Pro Glu Val Ser Gly Asn Gly Ala Ala Leu Phe Glu
 1               5                10                15

Met Phe Ser Tyr Leu Ile Leu Cys Pro Ser Arg Gly Ser Ser Leu Ile
              20                25                30

Cys Leu Ala Trp Pro Cys Val Pro Pro Val Pro Cys Ser Thr Ala Tyr
            35                40                45

Leu Val Pro Gln Val Leu Leu Ala Thr Pro Ala Val Thr Leu Asn Ser
         50                55                60

Phe Asn Ser Ala Leu Asn Ala Pro Ala Ser Glu Ala Cys Pro Ile Ser
 65                70                75                80

Phe Phe Leu Ala Ser Val Phe Phe Phe Ser Phe Phe Phe Pro Cys Phe
                 85                90                95

Cys Arg Arg Leu Arg Gly Glu Ser Phe Leu Trp Leu Pro Leu Leu Arg
              100               105               110

Leu Glu Leu Glu Glu Asn Leu Ile Phe Cys Ile
              115               120
```

```
<210> 1697
<211> 272
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (256)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (258)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (262)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (263)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (267)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1697
Pro Ala Pro Ala Ala His Val Ala Gly Asn Pro Gly Gly Asp Ala Ala
 1               5                  10                  15

Pro Ala Ala Thr Gly Thr Ala Ala Ala Ala Ser Leu Ala Thr Ala Ala
             20                  25                  30

Gly Ser Glu Asp Ala Glu Lys Lys Val Leu Ala Thr Lys Val Leu Gly
         35                  40                  45

Thr Val Lys Trp Phe Asn Val Arg Asn Gly Tyr Gly Phe Ile Asn Arg
     50                  55                  60

Asn Asp Thr Lys Glu Asp Val Phe Val His Gln Thr Ala Ile Lys Lys
 65              70                  75                  80

Asn Asn Pro Arg Lys Tyr Leu Arg Ser Val Gly Asp Gly Glu Thr Val
             85                  90                  95

Glu Phe Asp Val Val Glu Gly Glu Lys Gly Ala Glu Ala Ala Asn Val
             100                 105                 110

Thr Gly Pro Asp Gly Val Pro Val Glu Gly Ser Arg Tyr Ala Ala Asp
             115                 120                 125

Arg Arg Arg Tyr Arg Arg Gly Tyr Tyr Gly Arg Arg Arg Gly Pro Pro
     130                 135                 140

Arg Asn Ala Gly Glu Ile Gly Glu Met Lys Asp Gly Val Pro Glu Gly
 145                 150                 155                 160
```

```
Ala Gln Leu Gln Gly Pro Val His Arg Asn Pro Thr Tyr Arg Pro Arg
              165             170             175

Tyr Arg Ser Arg Gly Pro Pro Arg Pro Arg Pro Ala Pro Ala Val Gly
              180             185             190

Glu Ala Glu Asp Lys Glu Asn Gln Gln Ala Thr Ser Gly Pro Asn Gln
              195             200             205

Pro Ser Val Arg Arg Gly Tyr Arg Arg Pro Tyr Asn Tyr Arg Arg Arg
              210             215             220

Pro Arg Pro Pro Asn Ala Pro Ser Gln Asp Gly Lys Glu Ala Lys Ala
225             230             235             240

Gly Glu Ala Pro Thr Glu Asn Pro Ala Pro Pro Thr Ser Arg Ala Xaa
              245             250             255

Leu Xaa Asn Thr Arg Xaa Xaa Arg His Leu Xaa His Arg Gln Val Thr
              260             265             270
```

<210> 1698
<211> 88
<212> PRT
<213> Homo sapiens

<400> 1698
```
Arg Glu Thr Ala Cys Cys Gly Arg Asp Ala Arg Gly Ala Ala Pro Ala
 1             5             10             15

Ala Met Ala Val Thr Ala Leu Ala Ala Arg Thr Trp Leu Gly Val Trp
              20             25             30

Gly Val Arg Thr Met Gln Ala Arg Gly Phe Gly Ser Asp Gln Ser Glu
              35             40             45

Asn Val Asp Arg Gly Ala Gly Ser Ile Arg Glu Ala Gly Gly Ala Phe
    50             55             60

Gly Lys Arg Glu Gln Ala Glu Glu Glu Arg Tyr Phe Arg His Tyr Arg
 65             70             75             80

Leu Cys Phe Glu Ile Ser Leu Gly
              85
```

```
<210> 1699
<211> 223
<212> PRT
<213> Homo sapiens

<400> 1699
Cys Cys Ser Glu Gln Gln Arg Ile Ser Lys Asp Leu Ala Asn Ile Cys
 1               5                  10                      15

Lys Thr Ala Ala Thr Ala Gly Ile Ile Gly Trp Val Tyr Gly Gly Ile
            20                  25                  30

Pro Ala Phe Ile His Ala Lys Gln Gln Tyr Ile Glu Gln Ser Gln Ala
            35                  40                  45

Glu Ile Tyr His Asn Arg Phe Asp Ala Val Gln Ser Ala His Arg Ala
        50                  55                  60

Ala Thr Arg Gly Phe Ile Arg Tyr Gly Trp Arg Trp Gly Trp Arg Thr
65              70                  75                      80

Ala Val Phe Val Thr Ile Phe Asn Thr Val Asn Thr Ser Leu Asn Val
                85                  90                  95

Tyr Arg Asn Lys Asp Ala Leu Ser His Phe Val Ile Ala Gly Ala Val
            100                 105                 110

Thr Gly Ser Leu Phe Arg Ile Asn Val Gly Leu Arg Gly Leu Val Ala
            115                 120                 125

Gly Gly Ile Ile Gly Ala Leu Leu Gly Thr Pro Val Gly Gly Leu Leu
        130                 135                 140

Met Ala Phe Gln Lys Tyr Ser Gly Glu Thr Val Gln Glu Arg Lys Gln
145             150                 155                 160

Lys Asp Arg Lys Ala Leu His Glu Leu Lys Leu Glu Glu Trp Lys Gly
            165                 170                 175

Arg Leu Gln Val Thr Glu His Leu Pro Glu Lys Ile Glu Ser Ser Leu
            180                 185                 190

Gln Glu Asp Glu Pro Glu Asn Asp Ala Lys Lys Ile Glu Ala Leu Leu
        195                 200                 205

Asn Leu Pro Arg Asn Pro Ser Val Ile Asp Lys Gln Asp Lys Asp
    210                 215                 220
```

<210> 1700
<211> 543
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (264)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (269)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (279)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1700
Ala Arg Ala Arg Leu Thr Cys Pro Arg Arg Arg Gly Pro Trp Glu Ala
  1   5   10   15

Gly Ser Arg Ala Thr Val Ser Leu Thr Arg Leu Ala Leu Gly Val Pro
             20   25   30

Gly Pro Arg Glu His Pro Gly Gln Pro Glu Asp Ser Pro Glu Ala Glu
             35   40   45

Ala Ser Thr Leu Asp Val Phe Thr Glu Arg Leu Pro Pro Ser Gly Arg
         50   55   60

Ile Thr Lys Thr Glu Ser Leu Val Ile Pro Ser Thr Arg Ser Glu Gly
 65   70   75   80

Lys Gln Ala Gly Arg Arg Gly Arg Ser Thr Ser Leu Lys Glu Arg Gln
                 85   90   95

Ala Ala Arg Pro Gln Asn Glu Arg Ala Asn Ser Leu Asp Asn Glu Arg
                100   105   110

Cys Pro Asp Ala Arg Ser Gln Leu Gln Ile Pro Arg Lys Thr Val Tyr
             115   120   125

Asp Gln Leu Asn His Ile Leu Ile Ser Asp Asp Gln Leu Pro Glu Asn
         130   135   140

Ile Ile Leu Val Asn Thr Ser Asp Trp Gln Gly Gln Phe Leu Ser Asp
145   150   155   160

Val Leu Gln Arg His Thr Leu Pro Val Val Cys Thr Cys Ser Pro Ala
              165   170   175

Asp Val Gln Ala Ala Phe Ser Thr Ile Val Ser Arg Ile Gln Arg Tyr
              180   185   190

Cys Asn Cys Asn Ser Gln Pro Pro Thr Pro Val Lys Ile Ala Val Ala
              195   200   205

Gly Ala Gln His Tyr Leu Ser Ala Ile Leu Arg Leu Phe Val Glu Gln
              210   215   220

Leu Ser His Lys Thr Pro Asp Trp Leu Gly Tyr Met Arg Phe Leu Val
225   230   235   240

Ile Pro Leu Gly Ser His Pro Val Ala Arg Tyr Leu Gly Ser Val Asp
              245   250   255

Tyr Arg Tyr Asn Asn Phe Phe Xaa Asp Leu Ala Trp Xaa Asp Leu Phe
              260   265   270

Asn Lys Leu Glu Ala Gln Xaa Ala Val Gln Asp Thr Pro Asp Ile Val
              275   280   285

Ser Arg Ile Thr Gln Tyr Ile Ala Gly Ala Asn Cys Ala His Gln Leu
290   295   300

Pro Ile Ala Glu Ala Met Leu Thr Tyr Lys Gln Lys Ser Pro Asp Glu
305   310   315   320

Glu Ser Ser Gln Lys Phe Ile Pro Phe Val Gly Val Val Lys Val Gly
              325   330   335

Ile Val Glu Pro Ser Ser Ala Thr Ser Gly Asp Ser Asp Asp Ala Ala
              340   345   350

Pro Ser Gly Ser Gly Thr Leu Ser Ser Thr Pro Pro Ser Ala Ser Pro
              355   360   365

Ala Ala Lys Glu Ala Ser Pro Thr Pro Pro Ser Ser Pro Ser Val Ser
              370   375   380

Gly Gly Leu Ser Ser Pro Ser Gln Gly Val Gly Ala Glu Leu Met Gly
385   390   395   400

Leu Gln Val Asp Tyr Trp Thr Ala Ala Gln Pro Ala Asp Arg Lys Arg
              405   410   415

Asp Ala Glu Lys Lys Asp Leu Pro Val Thr Lys Asn Thr Leu Lys Cys
              420   425   430

```
Thr Phe Arg Ser Leu Gln Val Ser Arg Leu Pro Ser Ser Gly Glu Ala
    435                 440             445

Ala Ala Thr Pro Thr Met Ser Met Thr Val Val Thr Lys Glu Lys Asn
    450             455             460

Lys Lys Val Met Phe Leu Pro Lys Lys Ala Lys Asp Lys Asp Val Glu
465                 470             475                 480

Ser Lys Ser Gln Cys Ile Glu Gly Ile Ser Arg Leu Ile Cys Thr Ala
                485             490                 495

Arg Gln Gln Gln Asn Met Leu Arg Val Leu Ile Asp Gly Val Glu Cys
            500             505             510

Ser Asp Val Lys Phe Phe Gln Leu Ala Ala Gln Trp Ser Ser His Val
    515             520             525

Lys His Phe Pro Ile Cys Ile Phe Gly His Ser Lys Ala Thr Phe
    530             535             540
```

<210> 1701
<211> 71
<212> PRT
<213> Homo sapiens

<400> 1701

```
Ile Pro Ser Tyr Thr Ile Lys Cys Ser Ile Gly Arg Gln Ser Val Ser
1           5               10              15

Phe Phe Phe Tyr Val Tyr Cys Leu Cys Gly Val Lys Tyr Lys Ala Leu
            20              25              30

Gly Cys Ile Thr Tyr Ser Lys Ala Val Thr Leu Ser Leu Ile Cys Cys
            35              40              45

Asp Pro Leu Lys Met Cys Trp Gly Leu Phe Cys Cys His Cys Leu Cys
    50              55              60

Cys Trp Asn Leu Ala Leu Ser
65              70
```

<210> 1702
<211> 131
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1702
```
Glu His Val Phe Gly Phe Leu Phe Cys Val Ser Leu Leu Arg Ile Met
 1               5                   10                  15

Ala Ser Ser Ser Asp Gly Ile Ser Leu Ser Tyr Arg Pro Val Val Thr
            20                  25                  30

Gly Gln Asp Arg Met Met Asp Thr Glu Val Leu Ser Leu Leu Ser Ser
        35                  40                  45

Val Ala Leu Pro Ser Leu Leu Leu Ala Ser Glu Ser Phe Asp Ser Ile
    50                  55                  60

Tyr Pro Gly Ile Phe Cys Val Leu Met Phe Ser Ser Gly Leu Xaa Ser
65                  70                  75                  80

Ala Val Leu Ile Gly Arg Ala Leu Ser Phe Gln Ala Ile Leu Lys Gly
                85                  90                  95

Gly Gln Ser Lys Gly Gln Ser Leu Asn Pro Phe Cys Gly Leu Asn Asn
            100                 105                 110

Leu Arg Ile Lys Ser Ser Val Leu Leu Ile Pro Val Leu Leu Cys Gln
        115                 120                 125

Thr Leu Ser
    130
```

<210> 1703
<211> 330
<212> PRT
<213> Homo sapiens

<400> 1703
```
His Gly Asn Pro Asp Arg Arg Pro Arg Gly Glu Glu Glu Gly Asp Pro
 1               5                   10                  15

Val Gly Pro Ala Thr Leu Ser Ala Arg Leu Gly Ala Ser Ala Gly Ala
            20                  25                  30

Met Thr Ser Leu Thr Gln Arg Ser Ser Gly Leu Val Gln Arg Arg Thr
        35                  40                  45
```

```
Glu Ala Ser Arg Asn Ala Ala Asp Lys Glu Arg Ala Ala Gly Gly Gly
    50              55              60

Ala Gly Ser Ser Glu Asp Asp Ala Gln Ser Arg Arg Asp Glu Gln Asp
65              70              75              80

Asp Asp Asp Lys Gly Asp Ser Lys Glu Thr Arg Leu Thr Leu Met Glu
            85              90              95

Glu Val Leu Leu Leu Gly Leu Lys Asp Arg Glu Gly Tyr Thr Ser Phe
        100             105             110

Trp Asn Asp Cys Ile Ser Ser Gly Leu Arg Gly Cys Met Leu Ile Glu
        115             120             125

Leu Ala Leu Arg Gly Arg Leu Gln Leu Glu Ala Cys Gly Met Arg Arg
    130             135             140

Lys Ser Leu Leu Thr Arg Lys Val Ile Cys Lys Ser Asp Ala Pro Thr
145             150             155             160

Gly Asp Val Leu Leu Asp Glu Ala Leu Lys His Val Lys Glu Thr Gln
            165             170             175

Pro Pro Glu Thr Val Gln Asn Trp Ile Glu Leu Leu Ser Gly Glu Thr
        180             185             190

Trp Asn Pro Leu Lys Leu His Tyr Gln Leu Arg Asn Val Arg Glu Arg
        195             200             205

Leu Ala Lys Asn Leu Val Glu Lys Gly Val Leu Thr Thr Glu Lys Gln
    210             215             220

Asn Phe Leu Leu Phe Asp Met Thr Thr His Pro Leu Thr Asn Asn Asn
225             230             235             240

Ile Lys Gln Arg Leu Ile Lys Lys Val Gln Glu Ala Val Leu Asp Lys
            245             250             255

Trp Val Asn Asp Pro His Arg Met Asp Arg Arg Leu Leu Ala Leu Ile
            260             265             270

Tyr Leu Ala His Ala Ser Asp Val Leu Glu Asn Ala Phe Ala Pro Leu
    275             280             285

Leu Asp Glu Gln Tyr Asp Leu Ala Thr Lys Arg Val Arg Gln Leu Leu
    290             295             300

Asp Leu Asp Pro Glu Val Glu Cys Leu Lys Ala Asn Thr Asn Glu Val
305             310             315             320
```

Leu Trp Ala Val Val Ala Ala Phe Thr Lys
                    325   330

<210> 1704
<211> 86
<212> PRT
<213> Homo sapiens

<400> 1704
Val Phe Ile Ser Ile Val Ser Leu Arg His Gly Lys Gly Arg Met Leu
  1   5   10   15

Lys Gln Val Met Phe Val Phe Ser Gly Met Gly Pro Arg Ser His Cys
              20   25   30

Trp Gly Leu Pro Leu His Val Ala Pro Leu Cys Arg Pro Pro Gly Arg
          35   40   45

Leu Phe Pro Pro Ser Pro Thr Glu Ala Pro Arg Gly Leu Asn Arg Asn
      50   55   60

Leu Ala Asn Gln Arg His Phe Phe Cys Pro Ser Ile Phe His Thr Cys
  65   70   75   80

Pro Thr Val Leu Phe Phe
              85

<210> 1705
<211> 17
<212> PRT
<213> Homo sapiens

<400> 1705
Phe Gly Gly Glu Glu Met Ala Asp Ser Val Lys Thr Phe Leu Gln Asp
  1   5   10   15

Leu

<210> 1706
<211> 471
<212> PRT
<213> Homo sapiens

<220>

```
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (191)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (373)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (446)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1706
Ser Thr Pro Ser Gly Tyr Leu Glu Leu Pro Asp Leu Gly Gln Pro Tyr
 1               5                  10                  15

Ser Ser Ala Val Tyr Ser Leu Glu Glu Gln Tyr Leu Gly Leu Ala Leu
            20              25                  30

Asp Val Asp Arg Xaa Lys Lys Asp Xaa Glu Glu Glu Glu Asp Gln Xaa
            35              40                  45

Pro Pro Cys Pro Arg Leu Ser Arg Glu Leu Leu Glu Val Val Glu Pro
        50              55              60

Glu Val Leu Gln Asp Ser Leu Asp Arg Cys Tyr Ser Thr Pro Ser Ser
 65              70                  75                  80

Cys Leu Glu Gln Pro Asp Ser Cys Gln Pro Tyr Gly Ser Ser Phe Tyr
                85                  90                  95

Ala Leu Glu Glu Lys His Val Gly Phe Ser Leu Asp Val Gly Glu Ile
            100             105                 110
```

```
Glu Lys Lys Gly Lys Gly Lys Lys Arg Arg Gly Arg Arg Ser Lys Lys
        115             120             125

Glu Arg Arg Arg Gly Arg Lys Glu Gly Glu Glu Asp Gln Asn Pro Pro
    130             135             140

Cys Pro Arg Leu Ser Arg Glu Leu Leu Asp Glu Lys Gly Pro Glu Val
145             150             155             160

Leu Gln Asp Ser Leu Asp Arg Cys Tyr Ser Thr Pro Ser Gly Cys Leu
                165             170             175

Glu Leu Thr Asp Ser Cys Gln Pro Tyr Arg Ser Ala Phe Tyr Xaa Leu
            180             185             190

Glu Gln Gln Arg Val Gly Leu Ala Val Asp Met Asp Glu Ile Glu Lys
        195             200             205

Tyr Gln Glu Val Glu Glu Asp Gln Asp Pro Ser Cys Pro Arg Leu Ser
    210             215             220

Arg Glu Leu Leu Asp Glu Lys Glu Pro Glu Val Leu Gln Asp Ser Leu
225             230             235             240

Asp Arg Cys Tyr Ser Thr Pro Ser Gly Tyr Leu Glu Leu Pro Asp Leu
            245             250             255

Gly Gln Pro Tyr Ser Ser Ala Val Tyr Ser Leu Glu Glu Gln Tyr Leu
            260             265             270

Gly Leu Ala Leu Asp Val Asp Arg Ile Lys Lys Asp Gln Glu Glu Glu
        275             280             285

Glu Asp Gln Gly Pro Pro Cys Pro Arg Leu Ser Arg Glu Leu Leu Glu
    290             295             300

Val Val Glu Pro Glu Val Leu Gln Asp Ser Leu Asp Arg Cys Tyr Ser
305             310             315             320

Thr Pro Ser Ser Cys Leu Glu Gln Pro Asp Ser Cys Gln Pro Tyr Gly
            325             330             335

Ser Ser Phe Tyr Ala Leu Glu Glu Lys His Val Gly Phe Ser Leu Asp
        340             345             350

Val Gly Glu Ile Glu Lys Lys Gly Lys Gly Lys Lys Arg Arg Gly Arg
    355             360             365

Arg Ser Lys Lys Xaa Arg Arg Arg Gly Arg Lys Glu Gly Glu Glu Asp
    370             375             380
```

```
Gln Asn Pro Pro Cys Pro Arg Leu Asn Gly Val Leu Met Glu Val Glu
385             390             395             400

Glu Pro Glu Val Leu Gln Asp Ser Leu Asp Arg Cys Tyr Ser Thr Pro
            405             410             415

Ser Met Tyr Phe Glu Leu Pro Asp Ser Phe Gln His Tyr Arg Ser Val
            420             425             430

Phe Tyr Ser Phe Glu Glu Gln His Ile Ser Phe Ala Leu Xaa Val Asp
            435             440             445

Asn Arg Phe Phe Thr Leu Thr Val Thr Ser Leu His Leu Val Phe Gln
    450             455             460

Met Gly Val Ile Phe Pro Gln
465             470
```

```
<210> 1707
<211> 250
<212> PRT
<213> Homo sapiens

<400> 1707
Arg Glu Arg Asn Leu Gly Ala Pro Gly Ser Gly Leu Lys Ala Ala Arg
  1             5              10             15

Gln Ser Arg Ala Val Leu Ala Pro Ala Arg Gly Ala Ala Ala Pro Gly
            20             25             30

Val Ala Met Thr Ser Glu Leu Asp Ile Phe Val Gly Asn Thr Thr Leu
            35             40             45

Ile Asp Glu Asp Val Tyr Arg Leu Trp Leu Asp Gly Tyr Ser Val Thr
    50             55             60

Asp Ala Val Ala Leu Arg Val Arg Ser Gly Ile Leu Glu Gln Thr Gly
 65             70             75             80

Ala Thr Ala Ala Val Leu Gln Ser Asp Thr Met Asp His Tyr Arg Thr
            85             90             95

Phe His Met Leu Glu Arg Leu Leu His Ala Pro Pro Lys Leu Leu His
            100            105            110

Gln Leu Ile Phe Gln Ile Pro Pro Ser Arg Gln Ala Leu Leu Ile Glu
            115            120            125

Arg Tyr Tyr Ala Phe Asp Glu Ala Phe Val Arg Glu Val Leu Gly Lys
```

```
                130                    135                      140

     Lys Leu Ser Lys Gly Thr Lys Lys Asp Leu Asp Asp Ile Ser Thr Lys
     145                     150               155                 160

     Thr Gly Ile Thr Leu Lys Ser Cys Arg Arg Gln Phe Asp Asn Phe Lys
                         165               170               175

     Arg Val Phe Lys Val Val Glu Glu Met Arg Gly Ser Leu Val Asp Asn
                     180               185               190

     Ile Gln Gln His Phe Leu Leu Ser Asp Arg Leu Ala Arg Asp Tyr Ala
                     195               200               205

     Ala Ile Val Phe Phe Ala Asn Asn Arg Phe Glu Thr Gly Lys Lys Lys
                 210               215               220

     Leu Gln Tyr Leu Ser Phe Gly Asp Phe Ala Phe Cys Ala Glu Leu Met
     225                 230               235                 240

     Ile Gln Asn Trp Thr Leu Trp Ser Arg Arg
                     245               250
```

<210> 1708
<211> 337
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (112)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (127)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (283)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1708

```
     Ile Tyr His Pro Ala Val Val Glu Ser Thr Ile Cys Ser Gly Ile Tyr
     1                   5                   10                  15

     Thr Gln Cys Gln Phe Asp Ile Met Leu Gly Gly Thr Asp Cys Arg Thr
                     20                  25                  30
```

Phe Leu Thr Ser His Ile Asn Leu Lys Lys Thr Leu Cys Asp Val Ile
        35   40   45

Leu Met Val Gln Glu Arg Lys Ile Pro Ala His Arg Val Val Leu Ala
        50   55   60

Ala Ala Ser His Phe Phe Asn Leu Met Phe Thr Thr Asn Met Leu Glu
65   -   70   75   80

Ser Lys Ser Phe Glu Val Glu Leu Lys Asp Ala Glu Pro Asp Ile Ile
                85   90   95

Glu Gln Leu Val Glu Phe Ala Tyr Thr Ala Arg Ile Ser Val Asn Xaa
            100   105   110

Asn Asn Val Gln Ser Leu Leu Asp Ala Ala Asn Gln Tyr Gln Xaa Glu
        115   120   125

Pro Val Lys Lys Met Cys Val Asp Phe Leu Lys Glu Gln Val Asp Ala
        130   135   140

Ser Asn Cys Leu Gly Ile Ser Val Leu Ala Glu Cys Leu Asp Cys Pro
145   150   155   160

Glu Leu Lys Ala Thr Ala Asp Asp Phe Ile His Gln His Phe Thr Glu
            165   170   175

Val Tyr Lys Thr Asp Glu Phe Leu Gln Leu Asp Val Lys Arg Val Thr
            180   185   190

His Leu Leu Asn Gln Asp Thr Leu Thr Val Arg Ala Glu Asp Gln Val
        195   200   205

Tyr Asp Ala Ala Val Arg Trp Leu Lys Tyr Asp Glu Pro Asn Arg Gln
    210   215   220

Pro Phe Met Val Asp Ile Leu Ala Lys Val Arg Phe Pro Leu Ile Ser
225   230   235   240

Lys Asn Phe Leu Ser Lys Thr Val Gln Ala Glu Pro Leu Ile Gln Asp
            245   250   255

Asn Pro Glu Cys Leu Lys Met Val Ile Ser Gly Met Arg Tyr His Leu
            260   265   270

Leu Ser Pro Glu Asp Arg Glu Glu Leu Val Xaa Gly Thr Arg Pro Arg
        275   280   285

Arg Lys Lys His Asp Tyr Arg Ile Ala Leu Phe Gly Gly Ser Gln Pro
        290   295   300

```
Gln Ser Cys Arg Tyr Phe Asn Pro Lys Asp Tyr Ser Trp Thr Asp Ile
305                 310             315             320

Arg Cys Pro Phe Glu Lys Arg Glu Met Gln His Ala Cys Phe Gly Thr
                325             330             335

Met
```

```
<210> 1709
<211> 101
<212> PRT
<213> Homo sapiens

<400> 1709
Val Ala Ser Gly His Pro Arg Pro Asp Ile Thr Trp Met Lys Asp Asp
 1               5                 10              15

Gln Ala Leu Thr Arg Pro Glu Ala Ala Glu Pro Arg Lys Lys Lys Trp
                20              25              30

Thr Leu Ser Leu Lys Asn Leu Arg Pro Glu Asp Ser Gly Lys Tyr Thr
                35              40              45

Cys Arg Val Ser Asn Arg Ala Gly Ala Ile Asn Ala Thr Tyr Lys Val
    50              55              60

Asp Val Ile Gln Arg Thr Arg Ser Lys Pro Val Leu Thr Gly Thr His
65              70              75              80

Pro Val Asn Thr Thr Val Asp Phe Gly Gly Thr Thr Ser Phe Gln Cys
               85              90              95

Lys Val Arg Thr Thr
            100
```

```
<210> 1710
<211> 124
<212> PRT
<213> Homo sapiens

<400> 1710
Lys Leu Glu Leu His Arg Gly Gly Gly Arg Ser Arg Thr Ser Gly Ser
 1               5                 10              15

Pro Gly Leu Gln Glu Phe Gly Thr Arg Asn Leu Arg Lys Met Val Ala
```

```
                 20                    25                    30

Met Ala Ala Gly Pro Ser Gly Cys Leu Val Pro Ala Phe Gly Leu Arg
         35                  40                  45

Leu Leu Leu Ala Thr Val Leu Gln Ala Val Ser Ala Phe Gly Ala Glu
     50                  55                  60

Phe Ser Ser Glu Ala Cys Arg Glu Leu Gly Phe Ser Ser Asn Leu Leu
 65                  70                  75                  80

Cys Ser Ser Cys Asp Leu Leu Gly Gln Phe Asn Leu Leu Gln Leu Asp
             85                  90                  95

Pro Asp Cys Arg Gly Cys Cys Gln Glu Glu Ala Gln Phe Glu Thr Lys
            100                 105                 110

Lys Leu Tyr Ala Gly Ala Ile Leu Glu Val Cys Gly
            115                 120


<210> 1711
<211> 98
<212> PRT
<213> Homo sapiens

<400> 1711
Gly His Ala Ser Phe Arg Ala Phe Ser Phe Pro Pro Ser Ile Ser Asn
 1               5                  10                  15

Leu Gly Met Phe Gly Ile Asp Glu Phe Thr Ala Val Ile Asn Pro Pro
             20                  25                  30

Gln Ala Cys Ile Leu Ala Val Gly Arg Phe Arg Pro Val Leu Lys Leu
             35                  40                  45

Thr Glu Asp Glu Glu Gly Asn Ala Lys Leu Gln Gln Arg Gln Leu Ile
     50                  55                  60

Thr Val Thr Met Ser Ser Asp Ser Arg Val Val Asp Asp Glu Leu Ala
 65                  70                  75                  80

Thr Arg Phe Leu Lys Ser Phe Lys Ala Asn Leu Glu Asn Pro Ile Arg
             85                  90                  95

Leu Ala
```

```
<210> 1712
<211> 100
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1712
Gly Ile Lys Gly Pro Trp Thr Glu Ser Cys Leu Gly Gly Pro Ser Gly
1               5                   10                  15

Met Gly Xaa Gly His Thr Ser Leu Ala Ile Ser Gln Gln Asp Gln Ser
                20                  25                  30

Lys Leu Tyr His Leu Pro Pro Pro Thr Val Gly Pro His Ser Ile Ala
            35                  40                  45

Ser Pro Pro Glu Asp Arg Thr Val Lys Asp Ser Thr Pro Ser Ser Leu
        50                  55                  60

Asp Ser Asp Pro Leu Met Ala Met Leu Leu Lys Leu Gln Glu Ala Ala
65                  70                  75                  80

Asn Tyr Ile Glu Ser Pro Asp Arg Glu Thr Ile Leu Asp Pro Asn Leu
                85                  90                  95

Gln Ala Thr Leu
            100



<210> 1713
<211> 66
<212> PRT
<213> Homo sapiens

<400> 1713
Pro Ile Phe Ile Glu Tyr Phe Leu His Val Gln Leu His Pro Leu Cys
1               5                   10                  15

Lys Asp Tyr Met Asn Ile Ala His Ser Leu Leu Val Ser Gln Thr His
                20                  25                  30

Leu Tyr Ile Phe Leu Ser Glu Ala His Cys Thr Cys Ile Glu Ala Arg
            35                  40                  45

Ile Glu Ser Arg Lys Ile Lys Pro His Ser Pro Thr Ala Lys Cys Ala
        50                  55                  60
```

Phe Pro
 65

<210> 1714
<211> 107
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1714
Gly Thr Xaa Thr Phe Pro Gly Pro Pro Asn Asn Ser Ser Ile His Gly
  1   5   10   15

Gly Ser Lys Arg Ser Glu Asn Ser Tyr Cys Arg Asp Leu Arg Gly Gln
             20   25   30

Leu Arg Ala Ile Cys Cys Ser Ser Tyr Ser His Asp Arg His Thr Thr
             35   40   45

Glu Glu Arg Gly Ser Arg Gly Arg Arg Val Trp Arg Ile Arg Arg Leu
     50   55   60

His Thr Ser Gly Leu Pro Cys Cys Cys His Ser Gly Pro His Pro Arg
 65   70   75   80

Arg Leu Pro Asp Ile Leu Arg Leu Val Thr Ser Thr Lys Thr Asp His
                 85   90   95

Thr Asn Thr Thr Glu Gly Thr Leu Asp Tyr Leu
             100   105

<210> 1715
<211> 491
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1715

```
Ala Ala Arg Val Gly Arg His Gly Arg Arg Arg Arg Ser Ala Ala Met
 1               5                  10                  15

Ala Gly Arg Gly Gly Ser Ala Leu Leu Ala Leu Cys Gly Ala Leu Ala
            20                  25                  30

Ala Cys Gly Trp Leu Leu Gly Ala Glu Xaa Xaa Xaa Pro Gly Ala Pro
            35                  40                  45

Ala Ala Gly Met Arg Arg Arg Arg Arg Leu Gln Gln Glu Asp Gly Ile
        50                  55                  60

Ser Phe Glu Tyr His Arg Tyr Pro Glu Leu Arg Glu Ala Leu Val Ser
 65                  70                  75                  80

Val Trp Leu Gln Cys Thr Ala Ile Ser Arg Ile Tyr Thr Val Gly Arg
                85                  90                  95

Ser Phe Glu Gly Arg Glu Leu Leu Val Ile Glu Leu Ser Asp Asn Pro
            100                 105                 110

Gly Val His Glu Pro Gly Glu Pro Glu Phe Lys Tyr Ile Gly Asn Met
            115                 120                 125

His Gly Asn Glu Ala Val Gly Arg Glu Leu Leu Ile Phe Leu Ala Gln
        130                 135                 140

Tyr Leu Cys Asn Glu Tyr Gln Lys Gly Asn Glu Thr Ile Val Asn Leu
145                 150                 155                 160

Ile His Ser Thr Arg Ile His Ile Met Pro Ser Leu Asn Pro Asp Gly
                165                 170                 175

Phe Glu Lys Ala Ala Ser Gln Pro Gly Glu Leu Lys Asp Trp Phe Val
            180                 185                 190

Gly Arg Ser Asn Ala Gln Gly Ile Asp Leu Asn Arg Asn Phe Pro Asp
            195                 200                 205

Leu Asp Arg Ile Val Tyr Val Asn Glu Lys Glu Gly Gly Pro Asn Asn
        210                 215                 220
```

His Leu Leu Lys Asn Met Lys Lys Ile Val Asp Gln Asn Thr Lys Leu
225   230   235   240

Ala Pro Glu Thr Lys Ala Val Ile His Trp Ile Met Asp Ile Pro Phe
              245   250   255

Val Leu Ser Ala Asn Leu His Gly Gly Asp Leu Val Ala Asn Tyr Pro
              260   265   270

Tyr Asp Glu Thr Arg Ser Gly Ser Ala His Glu Tyr Ser Ser Ser Pro
          275   280   285

Asp Asp Ala Ile Phe Gln Ser Leu Ala Arg Ala Tyr Ser Ser Phe Asn
      290   295   300

Pro Ala Met Ser Asp Pro Asn Arg Pro Pro Cys Arg Lys Asn Asp Asp
305   310   315   320

Asp Ser Ser Phe Val Asp Gly Thr Thr Asn Gly Gly Ala Trp Tyr Ser
              325   330   335

Val Pro Gly Gly Met Gln Asp Phe Asn Tyr Leu Ser Ser Asn Cys Phe
              340   345   350

Glu Ile Thr Val Glu Leu Ser Cys Glu Lys Phe Pro Pro Glu Glu Thr
          355   360   365

Leu Lys Thr Tyr Trp Glu Asp Asn Lys Asn Ser Leu Ile Ser Tyr Leu
      370   375   380

Glu Gln Ile His Arg Gly Val Lys Gly Phe Val Arg Asp Leu Gln Gly
385   390   395   400

Asn Pro Ile Ala Asn Ala Thr Ile Ser Val Glu Gly Ile Asp His Asp
              405   410   415

Val Thr Ser Ala Lys Asp Gly Asp Tyr Trp Arg Leu Leu Ile Pro Gly
          420   425   430

Asn Tyr Lys Leu Thr Ala Ser Ala Pro Gly Tyr Leu Ala Ile Thr Lys
      435   440   445

Lys Val Ala Val Pro Tyr Ser Pro Ala Ala Gly Val Asp Phe Glu Leu
      450   455   460

Glu Ser Phe Ser Glu Arg Lys Glu Glu Glu Lys Glu Glu Leu Met Glu
465   470   475   480

Trp Trp Lys Met Met Ser Glu Thr Leu Asn Phe
              485   490

```
<210> 1716
<211> 179
<212> PRT
<213> Homo sapiens

<400> 1716
Ala Ala Glu Glu Thr Gly Gly Ala Gln Pro Glu Gly Arg Gly Val Gly
1                5                   10                  15

Pro Lys Glu Arg Glu Leu Gln His Ala Ala Leu Gly Gly Thr Ala Ile
            20                  25                  30

Gln Pro Cys Phe Phe Gln Asp Ile Ser Met Glu Ile Pro Gln Glu Phe
            35                  40                  45

Gln Lys Thr Val Ser Thr Met Tyr Tyr Leu Trp Met Cys Ser Thr Leu
        50                  55                  60

Ala Leu Leu Leu Asn Phe Leu Ala Cys Leu Ala Ser Phe Cys Val Glu
    65                  70                  75                  80

Thr Asn Asn Gly Ala Gly Phe Gly Leu Ser Ile Leu Trp Val Leu Leu
                85                  90                  95

Phe Thr Pro Cys Ser Phe Val Cys Trp Tyr Arg Pro Met Tyr Lys Ala
            100                 105                 110

Phe Arg Ser Asp Ser Ser Phe Asn Phe Phe Val Phe Phe Phe Ile Phe
            115                 120                 125

Phe Val Gln Asp Val Leu Phe Val Leu Gln Ala Ile Gly Ile Pro Gly
        130                 135                 140

Trp Gly Phe Ser Gly Trp Ile Ser Ala Leu Val Val Pro Lys Ala Thr
145                 150                 155                 160

Gln Gln Tyr Pro Cys Ser Cys Cys Trp Ser Pro Cys Ser Ser Leu Ala
                165                 170                 175

Leu Leu Cys


<210> 1717
<211> 499
<212> PRT
<213> Homo sapiens
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<220>
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<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1717
Arg Pro Val Arg Asn Ser Arg Val Thr Thr Xaa Pro Pro Ala Gln Gln
 1               5                  10                 15

Thr Arg Arg Asp Gln Ser Val Pro Val Gly Ser Met Ala Thr Lys Cys
            20                  25                  30

Gly Asn Cys Gly Pro Gly Tyr Ser Thr Pro Leu Glu Ala Met Lys Gly
          35                  40                  45

Pro Arg Glu Glu Ile Val Tyr Leu Pro Cys Ile Tyr Arg Asn Thr Gly
        50                  55                  60

Thr Glu Ala Pro Asp Tyr Leu Ala Thr Val Asp Val Asp Pro Lys Ser
 65                  70                  75                  80

Pro Gln Tyr Cys Gln Val Ile His Arg Leu Pro Met Pro Asn Leu Lys
                85                  90                  95

Asp Glu Leu His His Ser Gly Trp Asn Thr Cys Ser Ser Cys Phe Gly
            100                 105                 110

Asp Ser Thr Lys Ser Arg Thr Lys Leu Val Leu Pro Ser Leu Ile Ser
            115                 120                 125

Ser Arg Ile Tyr Val Val Asp Val Gly Ser Glu Pro Arg Ala Pro Lys
        130                 135                 140

Leu His Lys Val Ile Glu Pro Lys Asp Ile His Ala Lys Cys Glu Leu
145                 150                 155                 160

Ala Phe Leu His Thr Ser His Cys Leu Ala Ser Gly Glu Val Met Ile
                165                 170                 175

Ser Ser Leu Gly Asp Val Lys Gly Asn Gly Lys Gly Gly Phe Val Leu
```

```
                    180                      185                        190
        Leu Asp Gly Glu Thr Phe Glu Val Lys Gly Thr Trp Glu Arg Pro Gly
                195                      200                      205

        Gly Ala Ala Pro Leu Gly Tyr Asp Phe Trp Tyr Gln Pro Arg His Asn
                210                      215                      220

        Val Met Ile Ser Thr Glu Trp Ala Ala Pro Asn Val Leu Arg Asp Gly
        225                      230                      235                      240

        Phe Asn Pro Ala Asp Val Glu Ala Gly Leu Tyr Gly Ser His Leu Tyr
                        245                      250                      255

        Val Trp Asp Trp Gln Arg His Glu Ile Val Gln Thr Leu Ser Leu Lys
                        260                      265                      270

        Asp Gly Leu Ile Pro Leu Glu Ile Arg Phe Leu His Asn Pro Asp Ala
                        275                      280                      285

        Ala Gln Gly Phe Val Gly Cys Ala Leu Ser Ser Thr Ile Gln Arg Phe
                290                      295                      300

        Tyr Lys Asn Glu Gly Gly Thr Trp Ser Val Glu Lys Val Ile Gln Val
        305                      310                      315                      320

        Pro Pro Lys Lys Val Lys Gly Trp Leu Leu Pro Glu Met Pro Gly Leu
                        325                      330                      335

        Ile Thr Asp Ile Leu Leu Ser Leu Asp Asp Arg Phe Leu Tyr Phe Ser
                        340                      345                      350

        Asn Trp Leu His Gly Asp Leu Arg Gln Tyr Asp Ile Ser Asp Pro Gln
                355                      360                      365

        Arg Pro Arg Leu Thr Gly Gln Leu Phe Leu Gly Gly Ser Ile Val Lys
                370                      375                      380

        Gly Gly Pro Val Gln Val Leu Glu Asp Glu Glu Leu Lys Ser Gln Pro
        385                      390                      395                      400

        Glu Pro Leu Val Val Lys Gly Lys Arg Val Ala Gly Gly Pro Gln Met
                        405                      410                      415

        Ile Gln Leu Ser Leu Asp Gly Lys Arg Leu Tyr Ile Thr Thr Ser Leu
                        420                      425                      430

        Tyr Ser Ala Trp Asp Lys Gln Phe Tyr Pro Asp Leu Ile Arg Glu Gly
                435                      440                      445

        Ser Val Met Leu Gln Val Asp Val Asp Thr Val Lys Gly Gly Leu Lys
```

```
        450                    455                    460

Leu Asn Pro Asn Phe Leu Val Asp Phe Gly Lys Glu Pro Leu Gly Pro
465                 470                 475                 480

Ala Leu Ala His Xaa Xaa Arg Tyr Pro Gly Gly Asp Cys Ser Ser Asp
                    485                 490                 495

Ile Trp Ile
```

<210> 1718
<211> 213
<212> PRT
<213> Homo sapiens

<400> 1718
```
Phe Ile Met Asp Asn Leu Ser Ser Glu Glu Ile Gln Gln Arg Ala His
 1               5                  10                  15

Gln Ile Thr Asp Glu Ser Leu Glu Ser Thr Arg Arg Ile Leu Gly Leu
            20                  25                  30

Ala Ile Glu Ser Gln Asp Ala Gly Ile Lys Thr Ile Thr Met Leu Asp
            35                  40                  45

Glu Gln Lys Glu Gln Leu Asn Arg Ile Glu Glu Gly Leu Asp Gln Ile
        50                  55                  60

Asn Lys Asp Met Arg Glu Thr Glu Lys Thr Leu Thr Glu Leu Asn Lys
65                  70                  75                  80

Cys Cys Gly Leu Cys Val Cys Pro Cys Asn Arg Thr Lys Asn Phe Glu
                85                  90                  95

Ser Gly Lys Ala Tyr Lys Thr Thr Trp Gly Asp Gly Gly Glu Asn Ser
            100                 105                 110

Pro Cys Asn Val Val Ser Lys Gln Pro Gly Pro Val Thr Asn Gly Gln
            115                 120                 125

Leu Gln Gln Pro Thr Thr Gly Ala Ala Ser Gly Gly Tyr Ile Lys Arg
            130                 135                 140

Ile Thr Asn Asp Ala Arg Glu Asp Glu Met Glu Glu Asn Leu Thr Gln
145                 150                 155                 160

Val Gly Ser Ile Leu Gly Asn Leu Lys Asp Met Ala Leu Asn Ile Gly
                165                 170                 175
```

```
        Asn Glu Ile Asp Ala Gln Asn Pro Gln Ile Lys Arg Ile Thr Asp Lys
                    180                 185                 190

        Ala Asp Thr Asn Arg Asp Arg Ile Asp Ile Ala Asn Ala Arg Ala Lys
                    195                 200                 205

        Lys Leu Ile Asp Ser
                    210



        <210> 1719
        <211> 102
        <212> PRT
        <213> Homo sapiens

        <400> 1719
        Gly Met Glu Gly Thr Glu Met Gly Ala Arg Pro Gly Gly His Pro Gln
          1                 5                 10                  15

        Lys Trp Ser Phe Leu Trp Ser Leu Ala Leu Trp Leu Pro Leu Ala Leu
                     20                 25                  30

        Ser Val Ser Leu Phe Leu Gly Leu Ser Leu Ser Pro Pro Gln Pro Gly
                     35                 40                  45

        Leu Ser Leu Trp Cys Thr Leu Ser Tyr Cys Cys Glu Gln Trp Lys Phe
                50                  55                 60

        Lys Gly Thr Pro Ser Pro Ala Leu Leu Asn Leu Gly Thr Gln Pro Lys
         65                  70                 75                  80

        Lys Asp Lys Lys Leu Glu Asp Ser Ile Ala Thr Gln Leu Arg Glu Leu
                         85                 90                  95

        Pro Glu Lys Asn Ser Asn
                        100



        <210> 1720
        <211> 20
        <212> PRT
        <213> Homo sapiens

        <400> 1720
        Ala Gln Trp Leu Thr Pro Val Ile Leu Ala Phe Trp Lys Ala Glu Ala
          1                 5                 10                  15

        Gly Gly Ser Leu
```

20

<210> 1721
<211> 50
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1721
Ile Arg His Glu Val Leu Ile Val Pro Leu Leu Val Gly Leu Arg Gln
 1   5   10   15

Glu Asp His Leu Ser Pro Gly Gly Arg Gly Tyr Ser Glu Pro Arg Val
              20   25   30

His Tyr Cys Thr Pro Ala Arg Xaa Arg Glu Arg Asp Pro Val Ser Ile
              35   40   45

Asn Lys
     50

<210> 1722
<211> 56
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1722
Glu Xaa Gly Thr Glu Ser His Tyr Val Thr Gln Ala Gly Val Gln Trp
 1   5   10   15

His Asp Leu Ser Ser Leu Gln Pro Ser Pro Pro Gly Phe Lys Arg Phe
              20   25   30

Ser Cys Leu Arg Leu Leu Ser Ser Trp Asp Tyr Arg His Thr Pro Pro
              35   40   45

Arg Pro Ala Asn Phe Leu Tyr Phe
     50   55

```
<210> 1723
<211> 111
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (110)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1723
Gly Ser Thr His Ala Ser Ala Met Xaa Xaa Xaa Thr Ser Gly Val Gly
 1               5                  10                      15

Asp Glu Trp Trp Pro Lys Gln Gly Asp Ser Lys Gly Arg Ser Gly Gly
                20                  25                  30

Arg Pro Trp Arg Thr Ala Ala Arg Ser Gly Leu Thr Gly Ala Ser Ser
            35                  40                  45

Arg Xaa Arg Trp Thr Thr Ala Pro Arg Trp Ile Ser Ala Tyr Pro Ser
        50                  55                  60
```

```
Val Arg Xaa Ala Lys Glu Gly Arg Leu Gln Glu Val Ile Glu Thr Leu
65              70              75              80

Leu Ser Leu Glu Lys Gln Thr Arg Thr Ala Ser Asp Met Val Ser Thr
            85              90              95

Ser Arg Ile Leu Val Ala Ser Ser Gly Arg Cys Ala Asn Xaa Gly
            100             105             110
```

```
<210> 1724
<211> 75
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1724
Gly Arg Gly Arg Cys Glu Xaa Gly Lys Met Ala Ala Ala Ala Val Val
 1           5               10              15

Glu Phe Gln Arg Ala Gln Ser Leu Leu Ser Thr Asp Arg Glu Ala Ser
            20              25              30

Ile Asp Ile Leu His Ser Ile Val Lys Arg Asp Ile Gln Glu Asn Asp
            35              40              45

Glu Glu Ala Val Gln Val Lys Glu Gln Ser Ile Leu Glu Leu Gly Ser
            50              55              60

Leu Leu Ala Lys Thr Xaa Gln Ala Ala Glu Leu
65              70              75
```

```
<210> 1725
<211> 63
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
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<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1725

```
Pro Gly Ser Arg His His Arg Ala Arg Asp Arg Leu Ile His Phe Gly
 1               5                   10                  15

Ala Val Ser Thr Asp Val Leu Gly Cys Ser Ala His Cys Ser Leu Thr
            20                  25                  30

Gln Ser Pro Lys Met Asn Ile Gln Glu Gln Gly Phe Pro Leu Asp Leu
        35                  40                  45

Gly Ala Ser Phe Thr Glu Asp Ala Pro Pro Xaa Pro Ser Ala Trp
    50                  55                  60
```

<210> 1726
<211> 170
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (60)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (89)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (102)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (106)

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (113)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (115)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (118)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (128)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (140)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (153)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (156)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (162)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (169)
<223> Xaa equals any of the naturally occurring L-amino acids
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```
<400> 1726
Ala Glu Pro Asp Gly Ser His Pro Val Val Xaa Ala Pro Tyr Asn Gly
 1               5                   10                  15

Gly Pro Ala Gly Thr Cys Pro Lys Ile Lys Gln Glu Ala Val Ser Ser
            20              25                  30

Cys Thr His Leu Gly Ala Gly Pro Pro Leu Gln Gln Trp Pro Pro Ala
            35              40                  45

Gly Cys His Thr Asp Phe Pro Leu Gly Thr Ala Xaa Pro Gln Gln Asp
        50              55                  60

Leu Pro Arg Thr Leu Gly Leu Glu Gly Ser Ala Glu Gln Gln Gly Thr
 65              70                  75                      80

Val His Pro Ala Leu Pro Val Ser Xaa Arg Val Ser Ile Pro Thr Arg
                85                  90                  95

Gly Pro Asn Leu Pro Xaa Xaa Phe Leu Xaa Pro Ile Gln Met Gln Pro
                100             105                 110

Xaa Val Xaa Xaa Arg Xaa Ile Asn Gln Gly Val Tyr Ala Asn Arg Xaa
            115             120                 125

Leu Asp Ala Lys Gly Gly Pro Ser Gln Arg Gly Xaa Arg Arg Leu Trp
            130             135                 140

Ala Pro Glu Lys Asp Arg Gln Pro Xaa Phe Asp Xaa Gly Val Trp Glu
145             150                 155                 160

Lys Xaa Ser Lys Lys Gly Phe Ser Xaa Phe
                165                 170


<210> 1727
<211> 98
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (83)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (98)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1727
Leu Arg Ala Arg Gly Ala Ala Trp Ala Gly Gly Leu Leu His Arg Ala
 1               5                   10                  15

Ala Pro Cys Ser Leu Leu Pro Arg Leu Arg Thr Trp Thr Ser Ser Ser
                20                  25                  30

Asn Arg Ser Arg Glu Asp Ser Trp Leu Lys Ser Leu Phe Val Arg Lys
            35                  40                  45

Val Asp Pro Arg Lys Asp Ala His Ser Asn Leu Leu Ser Lys Lys Glu
        50                  55                  60

Thr Ser Asn Leu Tyr Lys Leu Gln Phe His Asn Val Lys Pro Glu Cys
 65                  70                  75                  80

Leu Glu Xaa Tyr Asn Lys Ile Cys Gln Glu Val Leu Pro Lys Ile His
                85                  90                  95

Xaa Xaa



<210> 1728
<211> 125
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (118)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1728
Gly Ser Leu Phe Pro Arg Val Leu Pro Ser Pro Leu Gly Pro Pro Gly
 1               5                   10                  15

Gly Lys His Gly Val Cys Pro Gly Ala Val Arg Glu Gln Cys Pro Thr
                20                  25                  30

Ala Leu Ser Ser Arg Phe Val Lys Phe Ser Met Pro Ser Val Pro Asp
                35                  40                  45

Phe Glu Thr Leu Phe Ser Gln Val Gln Leu Phe Ile Ser Thr Cys Asn
```

```
           50                      55                        60

      Gly Glu His Ile Arg Tyr Ala Thr Asp Thr Phe Ala Gly Leu Cys His
       65                      70                75                  80

      Gln Leu Thr Asn Ala Leu Val Glu Arg Lys Gln Pro Leu Arg Gly Ile
                          85                  90                  95

      Gly Ile Leu Lys Gln Ala Ile Asp Lys Met Gln Met Asn Thr Asn Gln
                      100                 105                 110

      Leu Thr Ser Ile His Xaa Asp Leu Cys Gln Leu Val Cys
                  115                 120                 125
```

```
<210> 1729
<211> 55
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1729
      Ile Leu Thr Met Arg Glu Ile Val His Ile Gln Ala Gly Gln Cys Gly
       1                   5                  10                  15

      Asn Gln Ile Gly Ala Lys Phe Trp Glu Val Ile Ser Asp Glu His Gly
                          20                  25                  30

      His Arg Pro His Arg Ala Pro Thr Thr Gly Asp Ser Asp Leu Pro Ala
                      35              .       40                  45

      Gly Thr Ala Xaa Ser Val Tyr
                  50                  55
```

```
<210> 1730
<211> 128
<212> PRT
<213> Homo sapiens

<400> 1730
      Arg Ile Ala Ala Ser Glu Thr Arg Val Ala Pro Ser Val Leu Arg Leu
       1                   5                  10                  15

      Ala Met Thr Ser Tyr Ser Tyr Arg Gln Ser Ser Ala Thr Ser Ser Phe
```

                    20   25   30

Gly Gly Leu Gly Gly Gly Ser Val Arg Phe Gly Pro Gly Val Ala Phe
          35   40   45

Arg Ala Pro Ser Ile His Gly Gly Ser Gly Gly Arg Gly Val Ser Val
      50   55   60

Ser Ser Ala Arg Phe Val Ser Ser Ser Ser Gly Gly Tyr Gly Gly
    65   70   75   80

Gly Tyr Gly Gly Val Leu Thr Ala Ser Asp Gly Leu Leu Ala Gly Asn
              85   90   95

Glu Lys Leu Thr Met Gln Asn Leu Asn Asp Arg Leu Ala Ser Tyr Leu
          100   105   110

Asp Lys Val Arg Ala Leu Glu Ala Ala Asn Gly Glu Leu Glu Val Lys
          115   120   125

<210> 1731
<211> 156
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (134)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (143)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1731
Ser Thr His Ala Ser Ala His Ala Ser Glu Trp Ser Glu Glu Gln Leu
  1   5   10   15

Ile Ala Ala Lys Phe Cys Phe Ala Gly Leu Leu Ile Gly Gln Thr Glu
              20   25   30

```
Val Asp Ile Met Ser Xaa Ala Thr Gln Ala Ile Phe Glu Ile Leu Glu
            35                  40                  45

Lys Ser Trp Leu Pro Gln Asn Cys Thr Leu Val Asp Met Lys Ile Glu
        50                  55                  60

Phe Gly Val Asp Val Thr Thr Lys Glu Ile Val Leu Ala Asp Val Ile
    65                  70                  75                  80

Asp Asn Asp Ser Trp Arg Leu Trp Pro Ser Gly Asp Arg Ser Gln Gln
                85                  90                  95

Lys Asp Lys Gln Ser Tyr Arg Asp Leu Lys Glu Val Thr Pro Glu Gly
                100                 105                 110

Leu Gln Met Val Lys Arg Asn Phe Glu Trp Val Ala Glu Arg Val Glu
        115                 120                 125

Leu Leu Leu Lys Ser Xaa Ser Gln Cys Arg Val Val Val Leu Xaa Gly
    130                 135                 140

Ser Thr Ser Asp Leu Gly His Cys Glu Lys Ile Gln
145                 150                 155
```

<210> 1732
<211> 101
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (78)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
<222> (91)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
<222> (93)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
<222> (94)
<223> Xaa equals any of the naturally occurring L-amino acids


<400> 1732
Val Asp Ile Arg Lys Asp Leu Tyr Ala Asn Thr Val Leu Ser Gly Gly
 1               5                  10                  15


Thr Thr Met Tyr Pro Gly Ile Ala Asp Arg Met Gln Xaa Glu Ile Thr
             20                  25                  30


Ala Leu Ala Pro Ser Thr Met Lys Ile Lys Ile Ile Ala Pro Pro Glu
          35                  40                  45


Arg Lys Tyr Ser Val Trp Ile Gly Gly Ser Ile Leu Ala Ser Leu Ser
       50                  55                  60


Thr Phe Gln Xaa Xaa Trp Ile Thr Ser Arg Ser Thr Thr Xaa Arg Xaa
 65                  70                  75                  80


Pro Pro Ser Ser Thr Ala Asn Ala Ser Asn Xaa Leu Xaa Xaa Ala Tyr
                 85                  90                  95


His Cys Cys Met Gly
                100




<210> 1733
<211> 101
<212> PRT
<213> Homo sapiens


<220>
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<221> SITE
<222> (57)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
<222> (101)
<223> Xaa equals any of the naturally occurring L-amino acids


<400> 1733
Ala Arg Arg Arg Gln Lys Gly Pro Ala Ala Pro Glu Ser Lys Pro Val
 1               5                  10                  15

Pro Ala Gln Ser Arg Pro Ala Ala Val Cys Leu Leu Phe Gln His Asp
                20              25              30

Arg Cys Arg Cys Val Leu Arg Gln Gly Leu Pro Gly Arg Trp Ser Gly
            35              40              45

Arg Ser His Leu Lys Thr Ala Val Xaa Pro Ser Ser Gly Ser Ser Cys
        50              55              60

Cys Cys Ser Cys Asn Ala Ser Lys Gln Ile Thr Ala Asp Lys Gln Cys
 65              70              75              80

Lys Gly Ile Ile Asp Cys Val Val Arg Ile Pro Lys Glu Gln Asp Ser
                85              90              95

Val Leu Leu Ala Xaa
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<210> 1734
<211> 152
<212> PRT
<213> Homo sapiens

<220>
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<400> 1734
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Ala Arg Val His Leu Glu Leu Gln Glu Ala Arg Val Met Leu Val Pro
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Leu Val Asn Val Asp Leu Leu Asp Trp Gln Gly Pro Gln Asp Leu Glu
            20                  25                  30

Val Glu Leu Val Pro Leu Val Pro Lys Glu Glu Arg Val Leu Leu Val
            35                  40                  45

Leu Leu Gly His Leu Val Leu Leu Val Leu Leu Val Cys Lys Glu Cys
        50                  55                  60

Leu Glu Lys Glu Glu Val Leu Glu Val Leu Val Gln Arg Val Thr Arg
 65                  70                  75                  80

Val Asn Gln Ala Val Gln Val Leu Met Val Ser Gln Gly Lys Met Ala
            85                  90                  95

Gln Gly Val Leu Xaa Val Leu Leu Val Leu Leu Ala Gln Leu Ala Ser
            100                 105                 110

Leu Glu Ile Lys Gly Glu Gly Gly Ala Pro Gly Phe Pro Xaa Ile Ser
            115                 120                 125

Trp Thr Cys Gly Xaa Pro Gly Glu Arg Gly Glu Met Ala Xaa Gln Asp
        130                 135                 140

Xaa Trp Phe Xaa Trp Cys Ser Trp
145                 150
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<210> 1735

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<211> 26
<212> PRT
<213> Homo sapiens

<400> 1735
Val Arg Ala Arg Val Pro Ser Pro Ala Ala Ala Met Gly Cys Thr Leu
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Ser Ala Glu Asp Lys Ala Ala Val Glu Arg
            20                  25


<210> 1736
<211> 95
<212> PRT
<213> Homo sapiens

<400> 1736
His Glu Val Ser Ala Ala Ser Leu Val Pro Ala Val Pro Gln Pro Glu
1               5                   10                  15

Ala Asp Asn Leu Thr Leu Arg Tyr Arg Ser Leu Val Tyr Gln Leu Asn
            20                  25                  30

Phe Asp Gln Thr Leu Arg Asn Val Asp Lys Ala Gly Thr Trp Ala Pro
            35                  40                  45

Arg Glu Leu Val Leu Val Val Gln Val His Asn Arg Pro Glu Tyr Leu
        50                  55                  60

Arg Leu Leu Leu Asp Ser Leu Arg Lys Ala Gln Gly Ile Asp Asn Val
65                  70                  75                  80

Leu Val Ile Phe Ser His Asp Ser Gly Arg Pro Arg Ser Ile Ser
                85                  90                  95


<210> 1737
<211> 77
<212> PRT
<213> Homo sapiens

<220>
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<400> 1737
Ile Ala Ser Gly Arg Ser Arg Gly Ser Lys Leu Thr Tyr Ala Cys Met
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        1                5                    10                   15

    Arg Arg His Ser Ser Ser Ile Glu Ser Pro Lys Phe Asn Ser Leu Ala
              20                      25                  30

    Val Val Leu Gln Arg Arg Asp Trp Glu Asn Pro Gly Val Thr Gln Leu
              35                  40                  45

    Asn Arg Leu Ala Ala His Pro Pro Phe Ala Ser Trp Arg Asn Ser Glu
          50                  55                  60

    Glu Ala Arg Thr Asp Arg Pro Ser Gln Gln Leu Arg Xaa
      65                  70                  75
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